Raport de Activitate - 2011

Colectivul IMAR

December 6, 2011

1 Lucrari publicate la finele lui 2010 si necontinute in Raportul pe 2010

1.1 In reviste straine cotate ISI

1. Burciu S. *On Normal Hopf Subalgebras of Semisimple Hopf Algebras*, Algebras and Representation Theory, (2010), Online First, 24 November 2010.

2. M. Colţoiu, C. Joiţa: *The Levi problem in the blow-up*, **Osaka Journal of Mathematics 47** (2010), pag. 943–947

3. Ionescu-Kruse D.: *Peakons arising as particle paths beneath small-amplitude water waves in constant vorticity flows*, **Journal of Nonlinear Mathematical Physics 17** (2010), pag. 415 – 422.

4. Cornean H. D.; Nenciu G.: *Faraday effect revisited: sum rules and convergence issues*, **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474012

5. F. Panaite, F. Van Oystaeyen: *L-R-smash biproducts, double biproducts and a braided category of Yetter-Drinfeld-Long bimodules*, **Rocky Mountain Journal of Mathematics 40(6)** (2010), pag. 2013 – 2024

6. A. Kristály, M. Mihailescu, V. Rădulescu, S. Tersian: *Spectral estimates for a nonhomogeneous difference problem*, **Communications in Contemporary Mathematics 12** (2010), pag. 1015–1029.

7. Grigory Panasenko, Ruxandra Stavre: *Asymptotic analysis of the Stokes flow with variable viscosity in a thin elastic channel*, **Networks and Heterogeneous Media, 5,** (2010), pag. 783 – 812.

8. Baranov, Anton; Chalendar, Isabelle; Fricain, Emmanuel; Mashreghi, Javad; Timotin, Dan: *Bounded symbols and reproducing kernel thesis for truncated Toeplitz operators*, **J. Funct. Anal. 259** (2010), pag. 2673–2701.

9. Koval'ski, A. V. and Ursu, V. I.: *An equational theory for a nilpotent A-loop*, **Algebra i Logika**, v. 49, Nr. 4 (2010), pag. 479 – 497.

10. A. Zaharescu, M. Zaki: *On the parity of the number of multiplicative partitions*, **Acta Arith. 145** (2010), pag. 221– 232.

1.2 In reviste din Romania cotate ISI

1. C. Năstăsescu, C. Chiteş: *A version of the Gabriel-Popescu theorem*, **An. Şt. Univ. "Ovidius" Constanţa 18 (2)** (2010), pag. 189 – 200.

1.3 In reviste B+ (CNCS)

1. Ligia Brinzanescu, Vasile Brinzanescu, and Neculae Dinuta: *The equations of generalized complex structures on Kodaira surfaces*, **Analele Universitatii de Vest, Timisoara, Seria Matematica-Informatica, Vol. XLVIII, Fasc. 1-2** (2010), pag. 35 – 44

2. C. Cobeli, M. Vâjâitu, A. Zaharescu : *A density theorem on even Farey fractions*, **Rev. Roumaine Math. Pures Appl., Tome LV, No.6** (2010), pag. 447 – 482.

3. C. Cobeli, M. Vâjâitu, A. Zaharescu: *A density theorem on even Farey fractions*, **Rev. Roumaine Math. Pures Appl. 55** (2010), pag. 447 – 481.

4. T. Zamfirescu: *Pushing convex and other bodies through rings and holes*, **An. Univ. Vest Timişoara, Ser. Mat. -Inf. 48**, 1-2 (2010) 299-306.

1.4 In alte reviste

1. F. P. Boca: *The distribution of the linear flow length in a honeycomb in the small-scatterer limit*, **New York J. Math. 16** (2010), pag. 651–735.

2. V. Rădulescu: *Combined effects and degenerate phenomena in nonlinear stationary problems*, **Le Matematiche LXV** (2010), pag. 169–191.

3. Juergen Sprekels, DanTiba: *Extensions of the control variational method*, **Preprint Weierstrass Institut, Berlin, no. 1572** (2010), pag. 1 – 9

4. A. Zaharescu, M. Zaki: *An ABC analog for arithmetical functions*, **J. Ramanujan Math. Soc. 25** (2010), pag. 345 – 354.

5. T. Zamfirescu: *Non-expanding mappings in graphs*, **Adv. Appl. Math. Sci. 6** (2010) 23-32.

1.5 In volume de conferinte

1. Hiroaki Mukaidani, Hua Xu, Vasile Dragan: *Stochastic Nash Games for Weakly Coupled Large Scale Discrete-Time Systems with State- and Control-Dependent Noise,*, **Proceedings of 49th IEEE Conference on Decision and Control**, December 15-17, 2010 Hilton Atlanta Hotel, Atlanta, GA, USA., (2010), pag. 1429-1435, ISBN:978-1-4244-7744-9/10/ 2010 IEEE

1.6 Capitole in volume colective

1. Florin Felix Nichita: *Colocvii Neprogramate*, **Meetings with Solomon Marcus**, editori: L. Spandonide and G. Paun, Spandugino Publishing House (2010), pag. 895–896 ISBN: 978-606-92456-1-3

2. Benhida, Chafiq; Timotin, Dan: *Automorphism invariance properties for certain families of multioperators*, **Operator theory live**, International Conference on Operator Theory, Timişoara, iulie 2008, editori: Hari Bercovici, Dumitru Gaşpar, Dan Timotin, Florian-Horia Vasilescu, Theta Foundation (2010), pag. 5–15, ISBN: 978-973-87899-6-8.

2 Lucrari publicate in 2011

2.1 In reviste straine cotate ISI

1. Marian Aprodu, Gavril Farkas: *Green's Conjecture for curves on arbitrary K3 surfaces*, **Compositio Math. 147** (2011), pag. 839 – 851.

2. Marian Aprodu, Marius Marchitan: *A note on vector bundles on Hirzebruch surfaces*, **C. R. Acad. Sci. Paris Ser. I Math. 349, no 11-12** (2011), pag. 687 – 690.

3. Barcau, M.; Pasol, V.: *mod p congruences for cusp forms of weight four for* $\Gamma_0(pN)$, **International Journal of Number Theory 7, no. 2** (2011), pag. 341 – 350.

4. Serban T. Belinschi, Marek Bożejko, Franz Lehner, Roland Speicher: *The normal distribution is* $\boxplus$*-infinitely divisible*, **Advances in Mathematics, 226, No. 4** (2011), pag. 3677–3689.

5. Serban T. Belinschi, Mihai Popa, Victor Vinnikov: *Infinite divisibility and a non-commutative Boolean-to-free Bercovici-Pata bijection*, **Journal of Functional Analysis, 262, Issue 1** (2012), pag. 94–123. (Available online 28 September 2010).

6. I. Beltiţă, D. Beltiţă: *On differentiability of vectors in Lie group representations*, **Journal of Lie Theory 21** (2011), 771–785.

7. I. Beltiţă, D. Beltiţă: *Modulation spaces of symbols for representations of nilpotent Lie groups*, **Journal of Fourier Analysis and Applications 17** (2011), 290–319.

8. I. Beltiţă, D. Beltiţă: *Continuity of magnetic Weyl calculus*, **Journal of Functional Analysis 260** (2011), pag. 1944–1968.

9. D. Beltiţă, J.E. Galé: *Universal objects in categories of reproducing kernels*, **Revista Matemática Iberoamericana 27** (2011), pag. 123–179.

10. L. Beznea: *Potential theoretical methods in the construction of measure-valued Markov branching processes*, **J. European Math. Soc. 13** (2011), pag. 685-707 (scor relativ de influenta: 3,378)

11. L. Beznea, A. Oprina: *Nonlinear PDEs and measure-valued branching type processes*, **J. Math. Anal. Appl. 384** (2011), pag. 16-32 (scor relativ de influenta: 1,078). Versiunea electronică a acestei lucrări a fost raportată in 2010.

12. L. Beznea, G. Trutnau: *On the quasi-regularity of non-sectorial Dirichlet forms by processes having the same polar sets*, **J. Math. Anal. Appl. 384** (2011), pag. 33-48 (scor relativ de influenta: 1,078)

13. L. Beznea, M. Röckner: *Applications of Compact Superharmonic Functions: Path Regularity and Tightness of Capacities*, **Complex Anal. and Operator Th. 5** (2011), pag. 731-741 (scor relativ de influenta: 0,653)

14. L. Beznea, A. Cornea, M. Röckner: *Potential theory of infinite dimensional Lévy processes*, **J. of Functional Analysis 261** (2011), pag. 2845-2876 (scor relativ de influenta: 1,814)

15. L. Beznea, M. Röckner: *From resolvents to càdlàg processes through compact excessive functions and applications to singular SDE on Hilbert spaces*, **Bull. Sci. Math.**, doi:10.1016/j.bulsci.2011.07.002, in press (scor relativ de influenta: 0,813)

16. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138.

17. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598.

18. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141.

19. Marius Buliga: *A priori inequalities between energy release rate and energy concentration for 3D quasistatic brittle fracture propagation*, **Mathematics and Mechanics of Solids 16, no. 3** (2011), pag. 265–282

20. Marius Buliga, Géry de Saxcé, Claude Vallée: *Blurred constitutive laws and bipotential convex covers*, **Mathematics and Mechanics of Solids 16, no. 2** (2011), pag. 161–171

21. S. Burciu: *On complements and the factorization problem for Hopf algebras*, **Central European Journal of Mathematics 9** (2011), pag. 905–914

22. S. Burciu: *Clifford theory for cocentral extensions*, **Israel Journal of Mathematics 181** (2011), pag. 111–123

23. S. Burciu: *Categorical Hopf kernels and representations of semisimple Hopf algebras*, **J. of Alg 337** (2011), pag. 253– 260

24. S. Burciu, V.Pasol: *Fusion rings arising from normal Hopf subalgebras*, **Algebras and Representation Theory 14** (2011), pag. 41 – 55

25. S. Burciu: *On the Representation Theory of Normal Hopf Subalgebras*, **Arabian Journal for Science and Engineering, 36** (2011), pag. 947 –955

26. M. Cipu, M. Mignotte, A. Togbé: *On the size of the intersection of two Lucas sequences of distinct type II*, **Science China Math. 54** (2011), 1299–1316

27. Iustin Coandă: *On the stability of syzygy bundles*, **Internat. J. Math. 22** (2011), pag. 515–534

28. A. C. Cojocaru, D. Grant, N. Jones: *One-parameter families of elliptic curves over Q with maximal Galois representations*, **Proceedings of the London Mathematical Society vol. 103 (4)** (2011), pag. 654–675.

29. A. Balog, A.C. Cojocaru, C. David: *Average twin prime conjecture for elliptic curves*, **American Journal of Mathematics vol. 133 no. 5** (2011), pag. 1179–1229.

30. Alexandru Constantinescu, Matteo Varbaro:
Koszulness, Krull Dimension and Other Properties of Graph-Related Algebras,
Journal of Algebraic Combinatorics , 34 , 2011, pp. 375–400

31. Alexandru Constantinescu:
Parametrizations of Ideals of $k[x, y]$ and $k[x, y, z]$,
Journal of Algebra, 346, 2011, pp. 1–30.

32. L. David. I. A. B. Strachan: *Dubrovin's duality for F-manifolds with eventual identities*, **Advances in Mathematics (5) 60, vol. 266** (2011), pag. 4031 – 4060.

33. L. David: *The conformal-Killing equation on G_2 and* Spin_7 *structures*, **Journal of Geometry and Physics, (6) vol. 61** (2011), pag. 1070 – 1078.

34. R. Diaconescu: *Grothendieck inclusion systems*, **Applied Categorical Structures 19(5)** (2011), pag. 783–802.

35. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.

36. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.

37. R. Diaconescu: *On quasi-varieties of multiple valued logic models*, **Mathematical Logic Quarterly 57(2)** (2011), pag. 194–203.

38. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)** (2011), pag. 108–117.

39. Vasile Dragan: *Stabilizing composite control for a class of linear systems modeled by singularly perturbed Ito differential equations*, **Automatica, 46,1** (2011), pag. 122 – 126.

40. V. Dragan, I. Ivanov: *A numerical procedure to compute the stabilizing solution of game theoretic Riccati equations of stochastic control*, **International Journal of Control, 84,4** (2011), pag. 783 – 800.

41. M. Sagara, H. Mukaidani, V. Dragan: *Near-Optimal Control for Multiparameter Singularly Perturbed Stochastic Systems*, **Optimal Control, Applications and Methods, 32** (2011), pag. 113 – 125.

42. V. Dragan, I. Ivanov : *Computation of the stabilizing solution of game theoretic Riccati equation arising in stochastic H_∞ control problems*, **Numerical Algorithms, 57,3** (2011), pag. 357 – 375.

43. A. Capatina, H. Ene, G. Pasa, D.Polisevschi, R. Stavre - Variational approach and optimal control of a PEM fuel cell, Nonlinear Analysis, 73 (2011) pp. 3242-3260

44. A. Capatina, H. Ene - Homogenization of the Stokes problem with a pure non-hogeneous slip boundary condition by periodic unfolding method, European Journal of Applied Mathematics, vol 22 (2011), pp.333-345

45. E. Carcadea, D. B. Ingham, I. Stefanescu, R. Ionete, H. Ene - The influence of permeability changes for a 7-serpantine channel PEM fuel cell performance, International Journal of Hydrogen Energy, vol.36 (2011), Issue 16, pp.10376-10383

46. Enescu, Florian; Yao, Yongwei: *The lower semicontinuity of the Frobenius splitting numbers*, **Math. Proc. Cambridge Philos. Soc. 150, no. 1** (2011), pag. 35-46.

47. Enescu, Florian: *A finiteness condition on local cohomology in positive characteristic*, **J. Pure and Appl. Algebra 216 no. 1** (2012), pag. 115-118.

48. Mihai Fulger: *The cones of effective cycles on projective bundles over curves*, **Math. Z 269** (2011), pag. 449-459

49. P. Cojuhari, A. Gheondea: *Closely embedded Krein spaces and applications to Dirac operators*, **J. Math. Anal. Appl. 376** (2011), pag. 540-550.

50. P. Cojuhari, A. Gheondea: *Embeddings, operator ranges, and Dirac operators*, **Complex Analysis Operator Theory** (2011), pag. 941-953.

51. M. Ghergu, A. Moradifam, S.D. Taliaferro, *Isolated singularities of polyharmonic inequalities*, **J. Functional Analysis** 261 (2011), pag. 660–680.

52. Grecea Valentin: A family of L^2-spaces associated to the jumps of a Markov process, Central European Journal of Math., 2011,9(3), 709-714.

53. W. Bruns, R. Hemmecke, B. Ichim, M Köppe, si C. Söger: *Challenging computations of Hilbert bases of cones associated with algebraic statistics.*, **Exp. Math. 20** (2011), pag. 1 – 9

54. Ignat, Liviu I., *A splitting method for the nonlinear Schrödinger equation*, **J. Differential Equations, 250** (2011), pag. 3022–3046

55. Banica, V., Ignat, Liviu I., *Dispersion for the Schrödinger equation on networks*, **JOURNAL OF MATHEMATICAL PHYSICS, 52** (2011), pag. 083703-14

56. Ignat, Liviu I., Stan Diana: *Dispersive Properties for Discrete Schrödinger Equations*, **Journal of Fourier Analysis and Applications, 11** (2011), pag. 1035-1065

57. V. Colao, G. Lopez, L. Leuştean, V. Martin-Marquez: *Alternative iterative methods for nonexpansive mappings, rates of convergence and applications*, **Journal of Convex Analysis 18** (2011), pag. 465–487.

58. Jean-Marc Drézet, Mario Maican: *On the geometry of the moduli spaces of semi-stable sheaves supported on plane quartics*, **Geometriae Dedicata 152** (2011), pag. 17 – 49

59. L. Maxim, M. Saito, J. Schürmann: *Symmetric Products of Mixed Hodge Modules*, **Journal de Mathématique Pures et Appliquées 96** (2011), pag. 462–483

60. E. Mihailescu: *Local geometry and dynamical behavior on folded basic sets*, **Journal of Statistical Physics 142** (2011), pag. 154 – 167

61. E. Mihailescu: *On a class of stable conditional measures*, **Ergodic Theory and Dynamical Systems 31** (2011), pag. 1499 —1515

62. E. Mihailescu and M. Urbanski: *Hausdorff dimension of the limit set of conformal iterated function systems with overlaps*, **Proceedings of the American Mathematical Society 139** (2011), pag. 2767-2775

63. E. Mihailescu: *Asymptotic distributions of preimages for endomorphisms*, **Ergodic Theory and Dynamical Systems 31** (2011), pag. 911-934

64. E. Mihailescu: *Unstable directions and fractal dimensions for skew products with overlaps in fibers*, **Mathematische Zeitschrift** (2011), online DOI 10.1007/s00209-010-0761-y

65. E. Mihailescu: *On some coding and mixing properties for a class of chaotic systems*, **Monatshefte fuer Mathematik** (2011), online DOI 10.1007/s00605-011-0347-8

66. E. Mihailescu: *Approximations of Gibbs states of arbitrary Holder potentials on hyperbolic folded sets*, **Discrete and Continuous Dynamical Systems 32** (2012), pag. 961-975.

67. Andrei Moroianu si Sergiu Moroianu: *The Dirac operator on generalized Taub-NUT spaces*, **Communications in Mathematical Physics 305** (2011), pag. 641–656.

68. L. Dăuş, C. Năstăsescu, M. Năstăsescu: *Von Neumann regularity of smash products associated with G-set gradings*, **J. Algebra 331 (1)** (2011), pag. 46 – 57.

69. S. Dăscălescu, C. Năstăsescu, A. Tudorache: *A note on regular objects in Grothendieck categories*, **Arab. J. Sci. Eng. - Mathematics 36 (6)** (2011), pag. 957 – 962.

70. Dinu V., Jensen A., Nenciu G.: *Perturbation of near threshold eigenvalues: crossover from exponential to non-exponential decay laws*, **REVIEWS IN MATHEMATICAL PHYSICS 23** (2011), pag. 83-125.

71. G. Nenciu, I. Nenciu: *On essential self-adjointness for magnetic Schrödinger and Pauli operators on the unit disc in* $\mathbb{R}^2$, **Lett. Math. Phys. 98** (2011), pag. 207 – 223.

72. Michael Pohst, Florin Nicolae *On the convergence of the Dirichlet series of an Artin L-function*, **Mathematische Nachrichten 284** (2011), pag. 2268 – 2271

73. V. Nitica, S. Sergeev: *An interval version of separation by semispaces in max-min convexity*, **Lin Alg Appl 435** (2011), pag. 1637 – 1648

74. V. Nitica: *Stably transitivity for extensions of hyperbolic systems by semidirect products of compact and nilpotent Lie groups*, **Discrete and Continuous Dynamical Systems 29** (2011), pag. 1197–1203

75. M. Akian, S. Gaubert, V. Nitica, I. Singer: *Best approximation in max-plus semimodules*, **Lin Alg Appl 435** (2011), pag. 3261–3296

76. F.A. Belgun, Andrei Moroianu, Liviu Ornea: *Essential points of conformal vector fields*, **Journal of Geometry and Physics 61** (2011), pag. 589–593.

77. Liviu Ornea, Mihaela Pilca: *Remarks on the product of harmonic forms*, **Pacific Journal of Mathematics, 250** (2011), pag. 353–363.

78. Liviu Ornea, Misha Verbitsky: *Automorphisms of locally conformally Kaehler manifolds*, **International Mathematics Research Notices** (2011), doi:10.1093/imrn/rnr053.

79. Liviu Ornea, Misha Verbitsky: *Oeljeklaus-Toma manifolds admitting no complex subvarieties*, **Mathematical Research Letters 18(4)** (2011), pag. 747–754.

80. Liviu Ornea, Radu Pantilie: *On holomorphic maps and generalized complex geometry*, **Journal of Geometry and Physics 61** (2011), pag. 1502–1515.

81. H. Albuquerque, F. Panaite: *Alternative twisted tensor products and Cayley algebras*, **Communications in Algebra 39(2)** (2011), pag. 686 – 700

82. F. Panaite, F. Van Oystaeyen: *Quasi-elementary H-Azumaya algebras arising from generalized (anti) Yetter-Drinfeld modules*, **Applied Categorical Structures 19(5)** (2011), pag. 803 – 820

83. A. Dimca, S. Papadima: *Finite Galois covers, cohomology jump loci, formality properties, and multinets*, **Annali Scuola Norm. Sup. Pisa 10** (2011), pag. 253–268

84. P. Daripa and G. Pasa, The effect of surfactant on long bubbles rising in vertical capillary tubes, Journal of Statistical Mechanics: **Theory and Experiment, Published 10 Feb. 2011, doi:10.1088/1742-5458/2011/02/L02003**, 14 pages, electronic

85. Păunescu, L: *On Sofic Actions and Equivalence Relations*, **Journal of Functional Analysis Volume 261, Issue 9** (2011), pag. 2461 – 2485

86. Mihaela Pilca: *Kählerian Twistor Spinors*, **Mathematische Zeitschrift, Volume 268, Issue 1 (2011), 223 – 255.**

87. Mihaela Pilca: *A New Proof of Branson's Classification of Elliptic Generalized Gradients*, **Manuscripta Mathematica, Volume 136, No.1-2 (2011), 65 – 81.**

88. I. Gruais, D. Poliševski: *Asymptotic heat equation for crossing superconductive thin walls*, **Applicable Analysis**, DOI: 10.1080/00036811.2011.587807, available online: june (2011), pag. 1–16

89. Andrei Popescu, Elsa L. Gunter: *Recursion principles for syntax with bindings and substitution*, **Proceeding of the 16th ACM SIGPLAN international conference on Functional Programming, ICFP** (2011), pag. 346 – 358

90. B. Prunaru: *Toeplitz and Hankel operators associated with subdiagonal algebras*, **Proc. Amer. Math. Soc. 139** (2011), pag. 1387–1396

91. B. Prunaru: *Fixed points for Luders operations and commutators*, **Journal of Physics A: Mathematical and Theoretical 44** (2011), pag. 185203

92. Mihai Prunescu: *Linear recurrent double sequences in $M_2(\mathbb{F}_2)$ are classified according to their geometric content*, **Symmetry 3** (2011), pag. 402 – 442. (An MDPI Journal, vezi http://www.mdpi.com/2073-8994/3/3/402/pdf)

93. Mihai Prunescu: *The Thue-Morse-Pascal double sequence and similar structures*, **Comptes Rendus - Mathematique 349** (2011), pag. 939 – 942.

94. Măntoiu, Marius; **Purice, Radu**; Richard, Serge: *Coherent states and pure state quantization in the presence of a variable magnetic field*, **International Journal of Geometric Methods in Modern Physics, 8** (2011), pag. 187–202

95. Viorel, Iftimie; **Purice, Radu**: *Eigenfunctions decay for magnetic pseudodifferential operators*, **Journal of Mathematical Physics, 52** (2011), doi:10.1063/ 1.3642622 (11 pages)

96. P. Pucci, V. Rădulescu: *Combined effects in quasilinear elliptic problems with lack of compactness*, **Rendiconti Lincei - Matematica e Applicazioni 22** (2011), pag. 178–205.

97. G. Bonanno, G. Molica Bisci, V. Rădulescu: *Infinitely many solutions for a class of nonlinear eigenvalue problem in Orlicz-Sobolev spaces*, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 263–268.

98. G. Bonanno, G. Molica Bisci, V. Rădulescu: *Multiple solutions of generalized Yamabe equations on Riemannian manifolds and applications to Emden-Fowler problems*, **Nonlinear Analysis: Real World Applications Applications 12** (2011), pag. 2656–2665.

99. G. Bonanno, G. Molica Bisci, V. Rădulescu: *Existence of three solutions for a non-homogeneous Neumann problem through Orlicz-Sobolev spaces*, **Nonlinear Analysis: Theory, Methods and Applications 74** (2011), pag. 4785–4795.

100. M. Mihailescu, V. Rădulescu, D. Stancu: *A Caffarelli-Kohn-Nirenberg-type inequality with variable exponent and applications to PDE's*, **Complex Variables and Elliptic Equations 56** (2011), pag. 659–669.

101. M. Boureanu, P. Pucci, V. Rădulescu: *Multiplicity of solutions for a class of anisotropic elliptic equations with variable exponent*, **Complex Variables and Elliptic Equations 56** (2011), pag. 755–767.

102. A. Kristály, M. Mihailescu, V. Rădulescu: *Discrete boundary value problems involving oscillatory nonlinearities: small and large solutions*, **Journal of Difference Equations and Applications 17** (2011), pag. 1431–1440.

103. M. Mihailescu, V. Rădulescu: *Sublinear eigenvalue problems associated to the Laplace operator revisited*, **Israel J. Math. 181** (2011), pag. 317–326.

104. B. Breckner, V. Rădulescu, C. Varga: *Infinitely many solutions for the Dirichlet problem on the Sierpinski gasket*, **Analysis and Applications 9** (2011), pag. 235–248.

105. M. Mihailescu, V. Rădulescu, S. Tersian: *Homoclinic solutions of difference equations with variable exponent*, **Topological Methods in Nonlinear Analysis 37** (2011).

106. Yu. Alkhutov, S. Antontsev, R. Gilbert, A. Pankov, V. Rădulescu: *Preface*, **Complex Variables and Elliptic Equations 56** (2011), pag. 543–544.

107. G. Da Prato, V. Rădulescu: *Foreword: Special Issue on Stochastic PDEs in Fluid Dynamics, Particle Physics and Statistical Mechanics*, **J. Math. Anal. Appl. 384** (2011), pag. 1.

108. D. Canright, S. Gangopadhyay, S. Maitra, P. Stanica, *Laced Boolean functions and subset sum problems in finite fields*, Discrete Applied Mathematics 159 (2011), 1059–1069.

109. E. Kilic, P. Stanica, *Factorizations and representations of binary polynomial recurrences by matrix methods*, Rocky Mountain Journal of Mathematics 41:4 (2011), 1247–1264.

110. C. Chun, P. Stanica, B. Neta, *Recurrence relations for a third-order family of methods in Banach Spaces*, Computers & Mathematics with Applications 61 (2011), 1665–1675.

111. T.W. Cusick, Y. Li, P. Stanica, *On a Combinatorial Conjecture*, Integers 11 (2011), 185–203; also, Electronic J. Combinatorial Number Theory 11 (2011), Art.#17 (17pp);

112. E. Kilic, P. Stanica, *A matrix approach for general higher order linear recurrences*, Bulletin of the Malaysian Mathematical Sciences Society 34 (1) (2011), 51–67.

113. R. Gera, P. Stanica, *The Spectrum of the Generalized Petersen Graphs*, Australasian Journal of Combinatorics 49 (2011), 39–45.

114. G. Panasenko, R. Stavre: *Asymptotic analysis of the Stokes in a thin cylindrical elastic tube*, **Appl. Anal., DOI 10.1080/00036811.2011.584187,** (2011).

115. Tiba Dan: *A finite element approximation in shape optimization problems with Neumann and mixed boundary conditions*, **SIAM J. Control Optimiz. vol. 49, no.3** (2011), pag. 1064 – 1077

116. Bakonyi, M.; Timotin, D.: *Extensions of positive definite functions on amenable groups*, **Canad. Math. Bull. 54** (2011), pag. 3–11.

117. Bercovici, H.; Li, W. S.; Timotin, D.: *A family of reductions for Schubert intersection problems*, **J. Algebraic Combin. 33** (2011), pag. 609–649.

118. Benhida, Chafiq; Gorkin, Pamela; Timotin, Dan: *Numerical ranges of $C_0(N)$ contractions*, **Integral Equations Operator Theory 70** (2011), pag. 265–279.

119. K. H. Mak, A. Zaharescu: *The distribution of values of short hybrid exponential sums on curves over finite fields*, **Math. Res. Lett. 18** (2011), pag. 155 – 174.

120. M. Xiong, A. Zaharescu: *Correlation of fractions with divisibility constraints*, **Math. Nachr. 284** (2011), pag. 393 – 407.

121. M. Caragiu, A. Zaharescu, M. Zaki: *On Ducci sequences with algebraic numbers*, **Fibonacci Quart. 49** (2011), pag. 34 – 40.

122. M. T. Tsai, A. Zaharescu: *On the action of permutations on distances between values of rational functions mod p*, **Finite Fields Appl. 17** (2011), pag. 481 – 487.

123. V. Pambuccian, T. Zamfirescu: *Paolo Pizzetti: The forgotten originator of triangle comparison geometry*, **Historia Math. 38**, 3 (2011) 415-422.

124. J. Itoh, T. Zamfirescu: *Moderation of convex bodies* **J. Convex Analysis 18**, 3 (2011) 865-872.

125. C. T. Zamfirescu, T. Zamfirescu: *Hamiltonian properties of generalized pyramids* **Math. Nachr. 284**, 13 (2011) 1739-1747.

2.2 In reviste din Romania cotate ISI

1. T. Albu: *The irrationality of sums of radicals via Cogalois Theory*, **An. Ştiinţ. Univ. "Ovidius", Constanţa Ser. Mat. 19** (2011), pag. 15 – 36.

2. T. Albu, P.F. Smith: *Primal, completely irreducible, and primary meet decompositions in modules*, **Bull. Math. Soc. Sci. Math. Roumanie 54** (102) (2011), pag. 297 – 311.

3. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 54(102)** (2011) no. 1, pag. 41 – 54.

4. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53.

5. M. Cipu: *Small solutions to systems of polynomial equations with integer coefficients*, **An. Şt. Univ. Ovidius Constanţa 19** (2011), 89–99

6. C. Cobeli, M. Vâjâitu, A. Zaharescu: *The distribution of rationals in residue classes*, **Mathematical Reports, Vol. 13(63), No.4** (2011).

7. Clement Radu Popescu *A simple presentation of the handlebody group for genus 2*, **Bull. Math. Soc. Sci. Math. Rom., 54(102) - 1** (2011), pag. (83 – 92)

8. D. Popescu: *Bounds of Stanley depth*, **An. St. Univ. Ovidius. Constanta 19** (2011), pag. 187 -194

9. Florin F. Nichita, Bogdan P. Popovici: *Yang-Baxter operators from (G, θ)-Lie algebras*, **Romanian Reports in Physics, Vol.63, Number 3** (2011), pag. 641–650.

10. Saima Parveen, C. Varsan: *Gradient flows with jumps associated with nonlinear Hamilton-Jacobi equations with jumps*, Mathematical Reports, Vol. 13(63), No. 3 (2011)

2.3 In reviste B+ (CNCS)

1. S. Burciu, B. Külshammer and L. Kadison: *Depth of subgroups and multimatrix algebra inclusions*, **Int. Electr. J. Alg. 9** (2011), pag. 133 – 166

2. Enrique Artal, Jose Cogolludo, Daniel Matei: *Quasi-projectivity, Artin-Tits groups, and pencil maps*, **Contemp. Math., 538** (2011), pag. 113–136.

2.4 In alte reviste

1. Marius Buliga: *A characterization of sub-riemannian spaces as length dilation structures constructed via coherent projections*, **Communications in Mathematical Analysis 11, no. 2** (2011), pag. 70–111

2. V. Dragan, T. Morozan, A. Stoica: *H2 optimal controllers for a large class of linear stochastic systems with periodic coefficients,*, **Annals of the Academy of Romanian Scientists, Series on Mathematics and its Applications, 3, 1** (2011), pag. 87 – 105.

3. E. Carcadea, M. Varlam, I. Stefanescu, V. Tanislav, H. Ene, B. Nicolescu-Mathematical modeling of steam methane reforming in a membrane reactor-preliminary results, Progress of Cryogenics and Isotopes Separation, vol. 14 (2011) nr.1

4. E. Carcadea, M.Varlam, I. Stefanescu, V. Tanislav, L. Patularu, D. Schitea, H. Ene - Study of flow field design for improving PEMFC performance, Progress of Cryogenics and Isotopes Separation, vol. 14 (2011) Nr.2

5. Baluna Mihai, Radu Gologan, Calin Popescu: *Olimpiada Internationala de Matematica 2011*, **Gazeta Matematica, seria B, nr 10, 2011, pag. 450-471**

6. Iftimie, Viorel; **Purice, Radu**: *Magnetic Fourier integral operators*, **Journal of Pseudo-Differential Operators and Applications, 2** (2011), pag. 141 – 218 (Revista Springer - Birkhäuser nou apărută în 2010)

7. Y. Lamzouri, M. T. Phaovibul, A. Zaharescu: *On the distribution of the partial sum of Euler's totient function in residue classes*, **Colloq. Math. 123** (2011), pag. 115–127.

2.5 In volume de conferinte

1. Ambro Florin, *Basic properties of log canonical centers*, in **Classification of Algebraic Varieties**, Conferinta Classification of Algebraic Varieties, Schiermonnikoog, May 10-15, 2009, editori: C. Faber, G. van der Geer, E. Looijenga, EMS Series of Congress Reports (2011), pag. 39 – 48, ISBN: 978-3-03719-007-4

2. Marian Aprodu, Gavril Farkas: *Koszul cohomology and applications to moduli*, **Grassmannians, Moduli Spaces and Vector Bundles**, editori: David A. Ellwood, Clay Mathematics Institute, Cambridge, MA, Emma Previato, Boston University, MA, AMS, Clay Mathematics Proccedings vol. 14 (2011), pag. 25 – 50, ISBN-10: 0-8218-5205-1, ISBN-13: 978-0-8218-5205-7

3. Vasile Brinzanescu: *From string theory to algebraic geometry and back*, **AIP CONFERENCE PROCEEDINGS 1329**, "ALEXANDRU MYLLER" MATHEMATICAL SEMINAR, Proceedings of the Centennial Conference, Iasi, Romania, 21-26 June 2010, editori: Viorel Barbu, Ovidiu Carja, AIP, American Institute of Physics (2011), pag. 26 – 34 ISBN: 978-0-7354-0884-5

4. Marius Buliga: *Braided spaces with dilations and sub-riemannian symmetric spaces*, **Geometry. Exploratory Workshop on Differential Geometry and its Applications**, Exploratory Workshop on Differential Geometry and its Applications, Iaşi, Romania, Sept. 2-4, 2009, editori: D. Andrica, S. Moroianu, Cluj University Press (2011), pag. 21–35, ISBN: 978-973-595-235-8

5. S. Burciu and L. Kadison: *Subgroups of depth three and more*, **Surveys in Differential Geometry**, Perspectives in Mathematics and Physics, Harvard, May, 2009, editori: T. Mrwoka, S.T. Yau, International Press (2011), pag. 21– 34 ISBN: : 978-1-57146-145-2

6. M. Martins, A. Madeira, R. Diaconescu, L. Barbosa: *Hybridization of Institutions*, **Lecture Notes in Computer Science 6859**, Algebra and Coalgebra in Computer Science, Winchester, England, editori: Andrea Corradini, Bartek Klin, Corina Cîrstea, Springer (2011), pag. 283–297 ISBN: 978-3-642-22943-5.

7. A. Diaconu, P. Garrett şi D. Goldfeld: *Moments for L–functions for $GL_r \times GL_{r-1}$*, **Contributions in Analytic and Algebraic Number Theory: Festschrift in Honor of S. J. Patterson**, International Conference on the Occasion of the 60th Birthday of S. J. Patterson, University Göttingen, July 27-29, 2009, editori: Valentin Blomer şi Preda Mihăilescu, Springer-Verlag (2011) ISBN: 978-1-4614-1218-2

8. L.F. Dinu, M.I. Dinu, *Shock wave − sound turbulence interaction*, Proceedings of the 3rd Congress of Applied, Computational, and Industrial Mathematics [3rd MACI 2011], L.R. Castro, M.C. Maciel, S.M. Castro Eds, Vol.3(2011), p.555, Dept of Math, Universitatea Nationala a Sudului, Bahia Blanca, Argentina

9. L.F. Dinu, M.I. Dinu, *Wave-wave interactions of a gasdynamic type*, Proceedings of the 33rd "Caius Iacob" Annual Conference of Fluid Mechanics, Bucuresti, September 2011.

10. Hiroaki Mukaidani, Masaru Unno, Hua Xua, Vasile Dragan: *Nash Strategies for Large-Scale Stochastic Delay Systems*, **Proceedings of the 18th IFAC World Congress, August 28 - September 2, Milano (Italy)**, editori: Bittanti, Sergio; Cenedese, Angelo; Zampieri, Sandro, (2011), pag. 5890 – 5895, ISBN: 978-3-902661-93-7

11. Hiroaki Mukaidani, Masaru Unno, Hua Xua, Vasile Dragan: *Nash Strategies of Markov Jump Stochastic Systems Applied to Weakly-Coupled Large-Scale Systems,*, **Proceedings of the 18th IFAC World Congress, 18, August 28 - September 2, Milano (Italy)**, editori:Bittanti, Sergio; Cenedese, Angelo; Zampieri, Sandro, (2011), pag. 5884 – 5889, ISBN: 978-3-902661-93-7.

12. A. Gaba, R. Gaba: *A mathematical model and computation program of the chamber furnace of boilers for air pollution reduction*, **6^{th} International Conference on Environmental Engineering and Management-Conference Abstracts Book, (Mathematical Modeling, Simulation and Optimization Section)**, 6^{th} International Conference on Environmental Engineering and Management, Balatonalmadi, Hungary, 1-4 September, editori: C. Teodosiu, A. Redey, B. Robu, Ecozone Publishing House (2011), pag. 179 – 180, ISBN: 978-973-7645-85-2.

13. M. Ghergu: *Steady-state solutions for a general Brusselator system*, **Modern Aspects of the Theory of Partial Differential Equations**, ISAAC Conference, London, editori: M. Ruzhansky, J. Wirth, Operator Theory: Advances and Applications, Vol. 216, Springer, Basel, (2011), pag. 153-166 ISBN 978-3-0348-0068-6.

14. V. Almendra si B. Ichim: *Introduction to jNormaliz 1.0*, **Proceedings of ISCOPAM**, ISCOPAM, Iasi, 12 - 16 Julie 2010, editori: O. Carja si D. Ghiba , Editura Univ. Alex. Ioan Cuza (2011), pag. 81 – 86, ISBN:978-973-703-602-5

15. L. Maxim, J. Schürmann: *Hirzebruch invariants of symmetric products*, **Topology of Algebraic Varieties and Singularities**, Lib60ber, Jaca, June 22-26, 2009, editori: J.I. Cogolludo, E. Hironaka. Contemporary Mathematics, 538. American Mathematical Society, Providence, RI (2011), pag. 163–177, ISBN: 978-0-8218-4890-6

16. L. Maxim: *On Milnor classes of complex hypersurfaces*, **Topology of Stratified Spaces**, Topology of Stratified Spaces, MSRI, Berkeley, September 8-12, 2008, editori: G. Friedman, E. Hunsiker, A. Libgober, L. Maxim. Mathematical Sciences Research Institute

Publications 58, Cambridge University Press, New York (2011), pag. 161–175, ISBN: 9780521191678

17. Florin F. Nichita, Barna L. Iantovics: *The Energy and the Entropy of Hybrid Multi-Agent Systems*, **Proceedings of ICVL**, International Conference on Virtual Learning, Cluj-Napoca, 28-29 Octombrie 2011, editori: Marin Vlada, Grigore Albeanu, Dorin Mircea Popovici, Editura Universitatii Bucuresti, pag 391-394, ISSN 1844-8933.

18. Liviu Ornea, Misha Verbitsky: *A report on locally conformally Kaehler manifolds*, **Harmonic Maps and Differential Geometry"** , A harmonic map fest, Cagliari 2009, editori: Eric Loubeau, Stefano Montaldo, Contemporary Mathematics 542 (2011), pag. 135–150, ISBN-10: 0-8218-4987-5, ISBN-13: 978-0-8218-4987-3

19. Mihaela Pilca: *A Representation-Theoretical Proof of Branson's Classification of Elliptic Generalized Gradients*, **Differential Geometry and its Applications, Volume 29 (2011), Supplement 1, pag. S188 – S195, 7th International Conference on Differential Geometry and its Applications, Brno.**

20. R. Răsdeaconu, J. Solomon: *Relative open Gromov-Witten invariants*, **Oberwolfach Reports**, "Real enumerative questions in complex and tropical geometry-Workshop", Oberwolfach, Germania, 17-23 Aprilie 2011, editori: G. Mikhalkin, E. Shustin, J. Walcher, J.-Y. Welschinger, EMS Publishing House, Volume 8, issue 2, 2011.

21. V. Ursu: *Soluble finitely separable Moufang loops*, **The Congress Romanian Mathematicians, June 29 July 5, 2011, Brasov, Romania**, (2011), pag. 125.

22. V. Ursu: *Quasiidentities of finitely generated nilpotent Moufang loop*, **International Conference LOOPS'11**, July 25-27, 2001, Trest, Czech Republic, (2011), pag. 18.

23. V. Ursu: *On some properties of quasivarieties of loops*, **International Conference: Mathematics and Information Technologies; Research and Education (MITRE-2011)**, August 22-25, 2011, Chisinau, R. Moldova (2011), pag. 114–115, ISBN: 978-9975-71-144-9

24. V. Ursu, E. Ursu: *Aplicatii ale produsului vectorial si produsului mixt in spatiul euclidian*, **International Conference: Mathematics and Information Technologies; Research and Education (MITRE-2011)**, August 22-25, 2011, Chisinau, R. Moldova (2011), pag. 198, ISBN: 978-9975-71-144-9

25. V. Ursu: *Free orderable A-loops*, **International Conference: The 19th Edition the Annual Conference on Applied and Industrial Mathematics — CAIM 2011**, CAIM 2011, September 22-25, 2011, Iasi, Romania, pag. 29-30, ISSN: 1641-5512.

26. Ilie Valusescu: *On the Friedrichs angle between the past and the future of some* Γ*-correlated processes*, **Proceedings of the International Conference on Theory and Applications of Mathematics and Informatics, ICTAMI-2011**, ICTAMI-2011, Alba Iulia, 21-24 iulie 2011, editori: Daniel Breaz, Nicoleta Breaz, Nicoleta Ularu. Acta Universitatis Apulensis, Special Issue (2011), pag. 85-94, ISSN: 1582-5329.

27. Jin-ichi Itoh, Chie Nara, Costin Vîlcu: *Continuous flattening of convex polyhedra*, **XIV Spanish Meeting on Computational Geometry**, Alcalá de Henares, 27-30 Iunie 2011, editori: Pedro Ramos csi Vera Sacristàn, Centre de Recerca Matemática (2011), pag. 95–98, ISSN: 2014-2323

28. Dan Tudor Vuza, Reinhold Frosch, Helmut Koeberl, Marian Vladescu *A Current-Driven RFID Reader with Automatic Antenna Tuning*, **2011 IEEE 17th SIITME Conference Proceedings**, 2011 IEEE 17th International Symposium for Design and Technology in Electronic Packaging SIITME, Timisoara, Octombrie 2011, editori Paul Svasta, Zsolt Illyefalvi-Vitez, Norocel Codreanu, Reka Batorfi, Mihaela Pantazica, Andreea Bonea, pag. 299–304, ISBN 978-1-4577-1277-7.

2.6 Capitole in volume colective

1. D. Beltiţă: *Functional analytic background for a theory of infinite-dimensional reductive Lie groups*, **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 367–392. ISBN: 978-0-8176-4740-7.

2. H. Mukaidani, V. Dragan: *Numerical Computation for solving cross-coupled large-scale singularly perturbed stochastic algebraic Riccati equation*, **Handbook of Optimization Theory**, editori: J. Varela, S. Acuna, Nova Science Publishers Inc., (2011), Chapter 16, pag. 407– 424, ISBN:978-1-60876-500-3.

3. B. Iftimie, M. Marinescu, C. Varsan: *Functionals associated with gradient stochastic flows and nonlinear SPDEs*, in: **Advanced mathematical methods for finance**, editori: Giulia Di Nunno; B K Oksendal, Springer (2011), pag. 397-417, ISBN: 978-3-642-18411-6

4. Dan Tudor Vuza, Reinhold Frosch *RFID Readers for the HDX Protocol - A Designers Perspective*, **Current Trends and Challenges in RFID**, editor Cornel Turcu, InTech Open Access Publisher (2011), pag. 229–254, ISBN 978-953-307-356-9.

3 Carti publicate in 2011

3.1 In strainatate

1. A.C. Cojocaru, K. Lauter, R. Pries, R. Scheidler: *Proceedings of the Women In Numbers Workshop (Banff Research Center, 2008*, Fields Institute Communications Series vol. 60 (2011), 280 pagini; ISBN-10: 0-8218-5226-4, ISBN-13: 978-0-8218-5226-2

2. A. Katok, V. Nitica: *Differential rigidity of abelian group actions. I, Introduction to cocycle problem*, Cambridge University Press (2011), 318 pages, 978-0-521-87909-5 ISBN:

3. M. Ghergu, V. Rădulescu: *Nonlinear PDEs: Mathematical Models in Biology, Chemistry and Population Genetics*, Springer Monographs in Mathematics, Springer-Verlag, Heidelberg (2011), pag. xviii+392 ISBN: 978-3-642-22663-2.

3.2 In Editura Academiei Romane

3.3 In alte edituri din Romania

1. Mihai Bălună, Radu Gologan: *Romanian Mathematical Competitions*, Societatea de Ştiinţe Matematice şi Editura Paralela 45 (2011), pag. 1-123 ISBN:

2. Liviu Ornea, Adriana Turtoi: *O introducere in geometrie (ed. a 2-a)*, Theta (2011), pag. 228+4, ISBN: 978-973-97899-7-5

3. Mihai Pascu: *Ecuatii cu derivate partiale*, Editura Universitatii Petrol-Gaze din Ploiesti (2011), pag. 238 ISBN:978-973-719-433-6

4 Volume editate in 2011

4.1 In strainatate

1. G. Friedman, E. Hunsiker, A. Libgober, L. Maxim: *Topology of Stratified Spaces*, Mathematical Sciences Research Institute Publications 58, Cambridge University Press, New York (2011); ISBN: 9780521191678.

2. G. Da Prato, V. Rădulescu: *Special Issue Stochastic PDEs in Fluid Dynamics, Particle Physics and Statistical Mechanics*, Journal of Mathematical Analysis and Applications (Elsevier) vol. 384 (2011), pag. 1–172 ISSN: 0022-247X.

3. A. Pankov, R. Gilbert, S. Antontsev, V. Rădulescu: *Special Issue Sobolev Spaces with Variable Exponent and Related Elliptic Problems: Theory and Applications*, Complex Variables and Elliptic Equations (Taylor & Francis), vol. 56, No. 7-9 (2011), pag. 543–851 ISSN: 1747-6933.

4. F. Luca, P. Stanica, *Proceedings of the 14th International Conference on Fibonacci Numbers*, Mex. Soc. Math, 2011.

4.2 In tara

1. Constantinescu Adrian - Editorial Board: *Proceedings of the 7-th International Conference on Theory and Applications of Mathematics and Informatics, ICTAMI 2011, Alba Iulia*, in "Acta Universitatis Apulensis" - S. Mathematics-Informatics, special issue, 2011, Aeternitas Publishing House, Alba Iulia (2011), pag. 1 - 566, ISBN: 1582-5329

2. Dorin Andrica, Sergiu Moroianu (Editors): *Geometry. Proceedings of the Exploratory Workshop on Differential Geometry and its Applications, Iasi 2009*, Cluj University Press (2011), pag. 1–147 + xiv, ISBN: 978-973-595-235-8.

5 Citari aparute in 2010 si necontinute in Raportul pe 2010

5.1 Citari aparute in reviste cotate ISI

Albu Toma

1. Y. Darani, *Notes on annihilator conditions in modules over commutative rings*, **An. Ştiinţ. Univ. "Ovidius", Constanţa Ser. Mat. 18** (2010), 59 – 71.
   Citeaza: T. Albu, P.F.Smith, *Primality, irreducibility, and complete irreducibility in modules over commutative rings*, **Rev. Roumaine Math. Pures Appl. 54 (2009), 275-286** (2009), pag. 275 – 286.

Ambro Florin

1. Fujino Osamu, Theory of non-lc ideal sheaves: basic properties, **Kyoto Journal of Mathematics Vol 50 (2)** (2010), 225 – 245
   Citeaza: Ambro Florin, *Non-klt techniques*, **Flips for 3-folds and 4-folds, Oxford Lecture Ser. Math. Appl. 35, Oxford Univ. Press** (2007), pag. 385 – 403

2. Birkar C.; Shokurov V. V., Mld's vs thresholds and flips, **Journal Fur Die Reine Und Angewandte Mathematik Vol 638** (2010), 209 – 234
   Citeaza: Ambro Florin, *The set of toric minimal log discrepancies*, **Central European Journal of Mathematics Vol 4 (3)** (2006), pag. 358 – 370

3. Fujino Osamu, Finite generation of the log canonical ring in dimension four, **Kyoto Journal of Mathematics Vol 50 (4)** (2010), 671 – 684
   Citeaza: Ambro Florin, *The moduli b-divisor of an lc-trivial fibration*, **Compositio Mathematica Vol 141 (2)** (2005), pag. 385 – 403

4. Fukuda Shigetaka, A note on the projective varieties of almost general type, **Rocky Mountain Journal of Mathematics Vol 40 (2)** (2010), 501 – 512
   Citeaza: Ambro Florin, *Nef dimension of minimal models*, **Mathematische Annalen Vol 330 (2)** (2004), pag. 309 – 322

5. Fujino, Osamu, Effective base point free theorem for log canonical pairs, II, **Michigan Mathematical Journal Vol 59 (2)** (2010), 303 – 312
   Citeaza: Ambro Florin, *Quasi-log varieties*, **Proc. Steklov Inst. Math. Vol 240 (1)** (2003), pag. 214 – 233

6. Schwede, Karl; Tucker, Kevin, On the number of compatibly Frobenius split subvarieties, prime F-ideals, and log canonical centers, **Annales de L'Institut Fourier (Grenoble) Vol 60 (5)** (2010), 1515 – 1531
   Citeaza: Ambro Florin, *Quasi-log varieties*, **Proc. Steklov Inst. Math. Vol 240 (1)** (2003), pag. 214 – 233

7. de Fernex Tommaso; Ein Lawrence, A vanishing theorem for log canonical pairs, **American Journal of Mathematics Vol 132 (5)** (2010), 1205 – 1221
   Citeaza: Ambro Florin, *On minimal log discrepancies*, **Mathematical Research Letters Vol 6 (5-6)** (1999), pag. 573 – 580

8. Favre Charles, Holomorphic self-maps of singular rational surfaces, **Publicacions Matematiques Vol 54 (2)** (2010), 389 – 432
Citeaza: Ambro Florin, *On minimal log discrepancies*, **Mathematical Research Letters Vol 6 (5-6)** (1999), pag. 573 – 580

9. Birkar C.; Shokurov V. V., Mld's vs thresholds and flips, **Journal Fur Die Reine Und Angewandte Mathematik Vol 638** (2010), 209 – 234
Citeaza: Ambro Florin, *On minimal log discrepancies*, **Mathematical Research Letters Vol 6 (5-6)** (1999), pag. 573 – 580

10. Broustet, Amael; Horing, Andreas, Effective non-vanishing conjectures for projective threefolds, **Advances Geometry Vol 10 (4)** (2010), 737 – 746
Citeaza: Ambro Florin, *Ladders on Fano varieties*, **J. Math. Sci. (New York) Vol 94 (1)** (1999), pag. 1126 – 1135

Barcau Alexandru Mugurel

1. Buium, A.; Simanca, S., Arithmetic partial differential equations II, **Advances in Mathematics 225, no. 3** (2010), 1308-1340.
Citeaza: Barcau, M., *Isogeny covariant differential modular forms and the space of elliptic curves up to isogeny*, **Compositio Mathematica 137, no. 3** (2003), pag. 237–273.

Belinschi T. Serban

1. Florent Benaych-Georges, On a surprising relation between the Marchenko-Pastur law, rectangular and square free convolutions, **Annales de l'Institut Henri Poincaré Probabilités et Statistiques Vol. 46, No. 3** (2010), 644–652
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

2. Florent Benaych-Georges, On a surprising relation between the Marchenko-Pastur law, rectangular and square free convolutions, **Annales de l'Institut Henri Poincaré Probabilités et Statistiques Vol. 46, No. 3** (2010), 644–652
Citeaza: S. Belinschi, *A note on regularity for free convolutions*, **Annales de l'Institut Henri Poincaré Probabilités et Statistiques Vol. 42** (2006), pag. 635–648

3. E. Di Nardo, P. Petrullo, D. Senato, Cumulants and convolutions via Abel polynomials, **European Journal of Combinatorics, Vol. 31, No. 7** (2010), pag. 1792–1804
Citeaza: Serban T. Belinschi, Alexandru Nica, *On a remarkable semigroup of homomorphisms with respect to free multiplicative convolution*, **Indiana University Mathematics Journal Vol. 57, No 4** (2008), pag. 1679–1713.

4. Florent Benaych-Georges, On a surprising relation between the Marchenko-Pastur law, rectangular and square free convolutions, **Annales de l'Institut Henri Poincaré Probabilités et Statistiques Vol. 46, No. 3** (2010), 644–652
Citeaza: Serban T. Belinschi, Florent Benaych-Georges, Alice Guionnet, *Regularization by free additive convolution, square and rectangular cases*, **Complex Analysis and Operator Theory, Vol. 3, No 3** (2009), pag. 611–660.

Buliga Marius

1. Christian Miehe, A phase field model for rate-independent crack propagation: Robust algorithmic implementation based on operator splits, **Computer Methods in Applied Mechanics and Engineering Volume 199, Issues 45-48,** (2010), 2765–2778
   Citeaza:Marius Buliga, *Energy minimizing brittle crack propagation.*, **J. Elasticity 52** (1998/99), pag. 201–238

2. C. Miehe, F. Welschinger, M. Hofacker, Thermodynamically consistent phase-field models of fracture: Variational principles and multi-field FE implementations, **International Journal for Numerical Methods in Engineering, 83** (2010), 1273–1311
   Citeaza:Marius Buliga, *Energy minimizing brittle crack propagation.*, **J. Elasticity 52** (1998/99), pag. 201–238

Capatina Anca

1. G. V. Alekseev, D. A. Teroshko, Extremum problems of boundary control for steady equations of thermal convection, **Journal of Applied Mechanics and Tecnical Pysics 51** (2010), 510-520
   Citează: A. Capatina, R. Stavre, *A control problem in biconvective flow*, **J. Math. Kyoto Univ. 37** (1997), pag. 585-595

Cheptea Dorin

1. Zsuzsanna Dancso, *On the Kontsevich integral for knotted trivalent graphs*, **Algebraic and Geometric Topology 10 no. 3**, (2010) pag. 1317-1365,
   DOI: 10.2140/agt.2010.10.1317
   Citeaza: D. Cheptea, T.T.Q. Le, *A TQFT associated to the LMO invariant of three-dimensional manifolds*, **Comm. Math. Phys. 272 no. 3**, (2007), pag. 601 - 634, DOI: 10.1007/s00220-007-0241-3

2. Gwenael Massuyeau, Jean-Baptiste Meilhan, *Equivalence relations for homology cylinders and the core of the casson invariant*, arXiv:1104.2763 v2
   Citeaza: D. Cheptea, K. Habiro, G. Massuyeau, *A functorial LMO invariant for Lagrangian cobordisms*, **Geom. Topol. 12 no. 2**, (2008), pag. 1091 - 1170

Cimpoeas Mircea

1. Harima, Tadahito; Sakaki, Sho; Wachi, Akihito *Generic initial ideals of some monomial complete intersections in four variables*, **Arch. Math. (Basel) 94 no.2** (2010), 129-137.
   Citeaza: Mircea Cimpoeas, *Generic initial ideal for complete intersections of embedding dimension three with strong Lefschetz property*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 50(98)** (2007), no. 1, 33-66.

2. Pardue Keith, *Generic sequences of polynomials*, **Journal of algebra Algebra 324, no. 4** (2010), 579-590.
   Citeaza: Mircea Cimpoeas, *Generic initial ideal for complete intersections of embedding dimension three with strong Lefschetz property*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 50(98)** (2007), no. 1, 33-66.

3. A.Rauf, *Depth and Stanley Depth of Multigraded Modules*, **Communications in Algebra Volume 38, Issue 2** (2010), pag. 773–784
Citeaza: Mircea Cimpoeas, *Stanley depth of complete intersection monomial ideals*, **Bull. Math. Soc. Sc. Math. Roumanie, 51(99)**(2008), 205-211.
Citeaza: Mircea Cimpoeas, *Stanley depth of monomial ideals in three variables*, Preprint(2008)

4. D. Popescu, I. Qureshi, *Computing the Stanley depth*, **Journal of Algebra, 323** (2010), 2943–2959
Citeaza: Mircea Cimpoeas, *Stanley depth of monomial ideals in three variables*, Preprint (2008). *Citeaza*: Mircea Cimpoeas, *Stanley depth of complete intersection monomial ideals* **Bull. Math. Soc. Sc.Math. Roumanie 51(99)** (2008), pag. 205–211.

Cipu Mihai

1. B. He, *On the number of solutions of symultaneous Pell equations* $x^2 - 2y^2 = y^2 - bz^2 = 1$ (in Chinese), Acta Math. Sinica, **51** (2008), 721–726
Citează: M. Cipu, M. Bennett, M. Mignotte, R. Okazaki, *On the number of solutions of simultaneous Pell equations, II*, **Acta Arith., 122** (2006), 407–417

2. R. S. Coulter, R. W. Matthews, *Dembowski-Ostrom polynomials from Dickson polynomials*, Finite Fields and Their Appl. **16** (2010), 369-379
Citează: M. Cipu, S. D. Cohen, *Dickson polynomial permutations*, in *Finite Fields and Applications*, (G.L. Mullen, D. Panario, I.E. Shparlinski, eds.), Contemp. Math. 461, A. M. S., 2008, pp.79–90

Coanda Iustin

1. R. Lazarsfeld, M. Popa, Derivative complex, BGG correspondence, and numerical inequalities for compact Kähler manifolds, **Invent. Math. 182** (2010), pag. 605–633
Citeaza: I. Coandă, *On the Bernstein-Gelfand-Gelfand correspondence and a result of Eisenbud, Fløystad and Schreyer*, **J. Math.Kyoto Univ. 43** (2003), pag. 429–439

2. I. Biswas, G. Trautmann, A criterion for homogeneous principal bundles, **Internat. J. Math. 21** (2010), pag. 1633–1638
Citeaza: I. Biswas, I. Coandă, G. Trautmann, *A Babylonian tower theorem for principal bundles over projective spaces*, **J. Math. Kyoto Univ. 49** (2009), pag. 69–82

Cobeli Cristian

1. Marklof, Jens; Strömbergsson, Andreas, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, **Ann. of Math. (2) 172, no. 3** (2010), 1949–2033.
Citeaza: Boca, Florin P.; Cobeli, Cristian; Zaharescu, Alexandru, *Distribution of lattice points visible from the origin*, **Comm. Math. Phys. 213, no. 2,** (2000), pag. 433–470.

2. Alkan, Emre; Xiong, Maosheng; Zaharescu, Alexandru, Pair correlation of sums of rationals with bounded height, **J. Reine Angew. Math. 641,** (2010), 21–67.
Citeaza: Boca, Florin P.; Cobeli, Cristian; Zaharescu, Alexandru, *Distribution of lattice points visible from the origin*, **Comm. Math. Phys. 213, no. 2,** (2000), pag. 433–470.

3. Haynes, Alan K., Numerators of differences of nonconsecutive Farey fractions, **Int. J. Number Theory 6, no. 3,** (2010), 655–666.
Citeaza: Boca, Florin P.; Cobeli, Cristian; Zaharescu, Alexandru, *A conjecture of R. R. Hall on Farey points*, **J. Reine Angew. Math. 535,** (2001), pag. 207–236.

4. Alkan, Emre; Xiong, Maosheng; Zaharescu, Alexandru, Pair correlation of sums of rationals with bounded height, **J. Reine Angew. Math. 641,** (2010), 21–67.
Citeaza: Boca, Florin P.; Cobeli, Cristian; Zaharescu, Alexandru, *A conjecture of R. R. Hall on Farey points*, **J. Reine Angew. Math. 535,** (2001), pag. 207–236.

5. Khan, Rizwanur, Spacings between integers having typically many prime factors, **Canad. Math. Bull. 53, no. 1,** (2010), 102–117.
Citeaza: Cobeli, Cristian; Zaharescu, Alexandru, *On the distribution of primitive roots* mod p, **Acta Arith. 83, no. 2,** (1998), pag. 143–153.

6. Glebsky, Lev; Shparlinski, Igor E., Short cycles in repeated exponentiation modulo a prime, **Designs Codes and Cryptography. 56, no. 1,** (2010), 35–42.
Citeaza: Cobeli, Cristian; Zaharescu, Alexandru, *An exponential congruence with solutions in primitive roots*, **Rev. Roumaine Math. Pures Appl. 44 (1999), no. 1,** (1998), pag. 15–22.

7. Haynes, Alan K., Numerators of differences of nonconsecutive Farey fractions, **Int. J. Number Theory 6, no. 3,** (2010), 655–666.
Citeaza: Cobeli, C.; Zaharescu, A., *On the Farey fractions with denominators in arithmetic progression*, **J. Integer Seq. 9, no. 3, Article 06. 3.4,** (2006), 26 pp. (electronic).

Cojocaru Alina-Carmen

1. C. David, J. Jiménez-Urroz, Square-free discriminants of Frobenius rings, **International Journal of Number Theory vol. 6** (2010), 1391 – 1412
Citeaza: A.C. Cojocaru, C. David, *Frobenius fields for elliptic curves*, **American Journal Math. 130, no 6** (2008), pag. 1535–1560.

2. I.E. Shparlinski, Tate-Shafarevich groups and Frobenius fields of reductions of elliptic curves, **Q. J. Math. 61 no. 2** (2010), 255 – 263
Citeaza: A.C. Cojocaru, C. David, *Frobenius fields for elliptic curves*, **American Journal Math. 130, no 6** (2008), pag. 1535–1560.

3. C. David, J. Jiménez-Urroz, Square-free discriminants of Frobenius rings, **International Journal of Number Theory vol. 6** (2010), 1391 – 1412
Citeaza: A.C. Cojocaru, *Square-free orders for CM elliptic curves modulo p*, **Math. Annalen 342, no 3** (2008), pag. 587–615.

4. K.S. Enoch Lee, On the sum of a prime and a Fibonacci number, **Int. J. Number Theory 6 no. 7** (2010), 1669–1676.
Citeaza: A.C. Cojocaru, M. R. Murty, *An introduction to sieve methods and their applications*, **London Math. Society Student Texts 66** (2006).

5. S. Gun, On solutions of polynomial congruences, **Acta Arith. 144 no. 2** (2010), 151–158.
Citeaza: A.C. Cojocaru, M. R. Murty, *An introduction to sieve methods and their applications*, **London Math. Society Student Texts 66** (2006).

6. J. Friedlander, H. Iwaniec, Ternary quadratic forms with rational zeros, **J. Théor. Nombres Bordeaux 22 no. 1** (2010), 97–113.
Citeaza: A.C. Cojocaru, M. R. Murty, *An introduction to sieve methods and their applications*, **London Math. Society Student Texts 66** (2006).

7. D. Zywina, Elliptic curves with maximal Galois action on their torsion points, **Bull. London Math. Soc. 362 no. 3** (2010), 1547–1570.
Citeaza: A.C. Cojocaru, C. Hall *Uniform results for Serre's theorem for elliptic curves*, **Int. Math. Res. Not. no 50** (2005), 3065–3080.

8. N. Jones, Almost all elliptic curves are Serre curves, **Trans. Amer. Math. Soc. 362 no. 3** (2010) 1547–1570.
Citeaza: A.C. Cojocaru, C. Hall *Uniform results for Serre's theorem for elliptic curves*, **Int. Math. Res. Not. no 50** (2005), 3065–3080.

9. C. David, J. Jiménez-Urroz, Square-free discriminants of Frobenius rings, **International Journal of Number Theory vol. 6** (2010), 1391 – 1412
Citeaza: A.C. Cojocaru, E. Fouvry, M.R. Murty, *The square sieve and the Lang-Trotter conjecture*, **Canadian J. Math. 57 no. 6** (2005), pag. 1155–1177.

10. I.E. Shparlinski, Tate-Shafarevich groups and Frobenius fields of reductions of elliptic curves, **Q. J. Math. 61 no. 2** (2010), 255 – 263
Citeaza: A.C. Cojocaru, E. Fouvry, M.R. Murty, *The square sieve and the Lang-Trotter conjecture*, **Canadian J. Math. 57 no. 6** (2005), pag. 1155–1177.

11. H. Iwaniec, J. Jiménez-Urroz, Orders of CM elliptic curves modulo p with at most two primes, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) 9, (2010), no. 4, 815–832. *Citeaza*: A.C. Cojocaru *Reductions of an elliptic curve with almost prime orders*, **Acta Arithm. 119 no. 3** (2005), pag. 265–289.

12. N. Jones, Almost all elliptic curves are Serre curves, **Trans. Amer. Math. Soc. 362 no. 3** (2010) 1547–1570.
Citeaza: A.C. Cojocaru *On the surjectivity of the Galois representations associated to non-CM elliptic curves*, **Canadian Math. Bulletin 48 no. 1** (2005), 16–31.

13. C. David, J. Jiménez-Urroz, Square-free discriminants of Frobenius rings, **International Journal of Number Theory vol. 6** (2010), 1391 – 1412
Citeaza: A.C. Cojocaru, W. Duke *Reductions of an elliptic curve and their Tate-Shafarevich groups*, **Math. Ann. 329 no. 3** (2004), pag. 513–534.

14. I.E. Shparlinski, Tate-Shafarevich groups and Frobenius fields of reductions of elliptic curves, **Q. J. Math. 61 no. 2** (2010), 255 – 263
Citeaza: A.C. Cojocaru, W. Duke *Reductions of an elliptic curve and their Tate-Shafarevich groups*, **Math. Ann. 329 no. 3** (2004), pag. 513–534.

15. H. Iwaniec, J. Jiménez-Urroz, Orders of CM elliptic curves modulo p with at most two primes, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) 9, (2010), no. 4, 815–832. *Citeaza*: A.C. Cojocaru *Questions about the reductions modulo primes of an elliptic curve*, Number Theory, **CRM Proc. Lecture Notes 36** (2004), pag. 61–79.

Diaconescu Razvan

1. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu: *Institution-independent Ultraproducts*, **Fundamenta Informaticæ 55(3-4)**, (2003) pag. 321–348.

2. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu: *Elementary diagrams in institutions*, **J. Logic and Computation 14(5)**, (2004) pag. 651–674.

3. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu: *Herbrand theorems in arbitrary institutions*, **Information Processing Letters 90**, (2004), pag. 29–37.

4. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu: *An institution-independent proof of Craig interpolation theorem*, **Studia Logica 77(1))**, (2004) pag. 59–79.

5. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu: *Proof systems for institutional logic*, **Journal of Logic and Computation 16(3)**, (2006), pag. 339–357.

6. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

7. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: R. Diaconescu, J. Goguen: *An Oxford survey of order sorted algebra,* **Mathematical Structures in Computer Science 4(4)** (1994) pag. 363–392

8. D. Găină, M. Petria: *Completeness by forcing*, **Journal of Logic and Computation 20(6)** (2010), pg. 1165–1186
Citează: M. Petria, R. Diaconescu: *Abstract Beth definability in institutions*, **Journal of Symbolic Logic 71(3)**, (2006), pag. 1002-1028.

Diaconu Calin Adrian

1. A. Diaconu şi P. Garrett, *Subconvexity bounds for automorphic L–functions,* **J. Inst. Math. Jussieu 9, no. 1** (2010), pag.95–124,
Citeaza: A. Diaconu şi D. Goldfeld, *Second moments of quadratic Hecke L–series and*

multiple Dirichlet series I, **Multiple Dirichlet Series, Automorphic Forms, and Analytic Number Theory, Proc. Sympos. Pure Math. 75, Amer. Math. Soc., 2006**, pag. 59–89.

2. S-C Liu, *Determination of $GL(3)$ cusp forms by central values of $GL(3) \times GL(2)$ L–functions,* **IMRN, no. 21** (2010), pag. 4025–4041,
Citeaza: G. Chinta şi A. Diaconu, *Determination of a GL_3 cuspform by twists of central L–values,* **Int. Math. Res. Not., no. 48** (2005), pag 2941–2967.

3. A. Bucur şi A. Diaconu, *Moments of quadratic Dirichlet L–functions over rational function fields,* **Mosc. Math. J. 10** (2010), pag. 485–517, 661,
Citeaza: A. Diaconu, D. Goldfeld şi J. Hoffstein, *Multiple Dirichlet series and moments of zeta and L–functions,* **Compos. Math. 139** (2003), pag. 297–360.

Dragan Vasile

1. M. G. Todorov, M. D. Fragoso, On the stability radii of continuous-time infinite Markov jump linear systems, **Mathematics of Control, Signals, and Systems (MCSS), 22,1** (2010), 23–38
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

2. Guoliang Wanga, Qingling Zhanga, Victor Sreeramc, H_∞ control for discrete-time singularly perturbed systems with two Markov processes, **Journal of the Franklin Institute, 347, 5,** (2010), 836–847
Citeaza Peng Shi; Dragan, V., *Asymptotic H_∞ control of singularly perturbed systems with parametric uncertainties*, **IEEE Trans. on Automatic Control, 44, 9** (¡1999¿), pag. 1738–1742.

3. Lin, Z.; Lin, Y.; Zhang, W.; , H_∞ filtering for non-linear stochastic markovian jump systems, **IET Control Theory and Applications, 4, (12)** (2010), 2743 –2756
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

4. Lin Z.; Lin Y.; Zhang W., H_∞ stabilization of non-linear stochastic active fault-tolerant control systems: fuzzy-interpolation approach, **IET Control Theory and Applications, 4, (10)** (2010), 2003 –2017
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

5. Ungureanu Viorica Mariela; Cheng Sui-Sun, Mean square error synchronization in networks with ring structure, **Taiwanese Journal of Math., 14, 6** (2010), 2405– 2433
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

6. Feng, Yantao; Anderson, Brian D. O., An iterative algorithm to solve state-perturbed stochastic algebraic Riccati equations in LQ zero-sum games, **Systems Control Lett., 59, 1** (2010), 50 –56
Citeaza: Dragan V.; Morozan T., *Global solutions to a game-theoretic Riccati equation of stochastic control*, **J. Differential Equations, 138** (1997), pag. 328–350.

7. Berman, Nadav; Shaked, Uri , Robust L_∞-induced filtering and control of stochastic systems with state-multiplicative noise, **IEEE Trans. Automat. Control 55, 3** (2010), 732– 737
Citeaza: V. Dragan, T. Morozan, *Mixed input-output optimization for time varying It systems with state-dependent noise*, **Dynam. Contin. Discrete Impuls. Systems 3, 3** (1997), pag. 317–333.

8. Berman, Nadav; Shaked, Uri , Robust L_∞-induced filtering and control of stochastic systems with state-multiplicative noise, **IEEE Trans. Automat. Control 55, 3** (2010), 732– 737
Citeaza: V. Dragan, T. Morozan, A. Halanay, *Optimal stabilizing compensator for linear systems with state-dependent noise*, **Stochastic Anal. Appl. 10, 5** (1992), pag. 557 –572.

9. Florin Ann-Britt; Lavados Gaston, Feeding habits of juvenile flatfish in relation to habitat characteristics in the Baltic Sea, **ESTUARINE COASTAL AND SHELF SCIENCE, 86, 4** (2010), 607 – 612
Citeaza: Dragan Vasile, *The linear quadratic optimization problem for a class of singularly perturbed stochastic systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 1, 1** (2005), pag. 53 –63.

10. Li Zhao-Yan; Wang Yong; Zhou Bin; et al., On unified concepts of detectability and observability for continuous-time stochastic systems, **APPLIED MATHEMATICS AND COMPUTATION, 217, 2** (2010), 521 –536
Citeaza: Dragan V ; Halanay A ; Stoica A, *A small gain theorem for linear stochastic systems*, **SYSTEMS and CONTROL LETTERS, 30, 5** (1987), pag. 243– 251.

11. Dongxiao Wua, Jun Wua, Sheng Chen, Robust stabilization control for discrete-time networked control systems, **International Journal of Control, 83, 9** (2010), 1885–1894
Citeaza: Dragan V ; Halanay A ; Stoica A, *A small gain theorem for linear stochastic systems*, **SYSTEMS and CONTROL LETTERS, 30, 5** (1887), pag. 243– 251.

12. Wei Zhanga, Jianghai Hu, Jianming Lianc, Quadratic optimal control of switched linear stochastic systems, **Systems and Control Letters 59, 11** (2010), 736 – 744
Citeaza: Dragan Vasile; Morozan Toader; Stoica Adrian, *H^2 optimal control for linear stochastic systems*, **Automatica J. IFAC, 40** (2004), pag. 1103–1113.

Ene Horia

Lucrarea: H. I. Ene and E. Sanchez-Palencia, Equations et phenomenes de surface pour l'ecoulement dans un modele de milieu poreux, Journal de Mecanique, vol. 4 (1975) pp.73-108 a fost citata in: Mo Mu, Xiaohoug Zhu - Decoupled schemes for a non-stationary mixed Stokes-Darcy model, Mathemaics of Computation, vol.79 (2010) nr.270, pp.707-731

Faciu Cristian

1. Voyiadjis George Z., Deliktas Babur, Theoretical and Experimental Characterization for the Inelastic Behavior of the Micro-/Nanostructured Thin Films Using Strain Gradient Plasticity With Interface Energy, **Journal of engineering materials and technology - Transactions of the ASME 131** (2009), 041202-1 – 041202-15
   Citeaza: C. Făciu and A. Molinari, *Evolution of layered structures in a gradient-dependent viscoplastic material*, **Journal De Physique IV 6 (1996)**, pp. 45–54. *Citeaza*: C. Făciu and A. Molinari, *A non-local rate-type viscoplastic approach to patterning of deformation*, **Acta Mechanica 126 (1998)**, p. 71–99. *Citeaza*: C. Făciu, A. Molinari, M. Dablij and A. Zeghloul, *A new rate-type gradient-dependent viscoplastic approach for stop-and-go strain band propagation. Numerical vs. physical experiments*, **Journal De Physique IV 8 (1998)**, p. 143–150.

2. Xia Li, Hai-Sui Yu, Influence of loading direction on the behavior of anisotropic granular materials, **International Journal of Engineering Science 47**, November-December (2009), pag. 1284–1296, Mechanics, Mathematics and Materials a Special Issue in memory of A.J.M. Spencer. *Citeaza*: C. Făciu and A. Molinari, *Evolution of layered structures in a gradient-dependent viscoplastic material*, **Journal De Physique IV 6 (1996)**, pp. 45–54. *Citeaza*: C. Făciu and A. Molinari, *A non-local rate-type viscoplastic approach to patterning of deformation*, **Acta Mechanica 126 (1998)**, p. 71–99. *Citeaza*: C. Făciu, A. Molinari, M. Dablij and A. Zeghloul, *A new rate-type gradient-dependent viscoplastic approach for stop-and-go strain band propagation. Numerical vs. physical experiments*, **Journal De Physique IV 8 (1998)**, p. 143–150.

Gheondea Aurelian

1. Blume-Kohout Robin; Ng Hui Khoon; Poulin David; et al., Information-preserving structures: A general framework for quantum zero-error information, **PHYSICAL REVIEW A, Volume: 82 Issue: 6** (2010),Article Number: 062306
   Citeaza: A. Arias, A. Gheondea, and S. Gudder, *Fixed points of quantum operations*, **J. Mathematical Physics, 43:12** (2002), pag. 5872–5881

2. Shen Jun; Wu Junde, GENERALIZED QUANTUM OPERATIONS AND ALMOST SHARP QUANTUM EFFECTS, **REPORTS ON MATHEMATICAL PHYSICS Volume: 66 Issue: 3** (2010), 367–374.
   Citeaza: A. Arias, A. Gheondea, and S. Gudder, *Fixed points of quantum operations*, **J. Mathematical Physics, 43:12** (2002), pag. 5872–5881

3. Gudder Stan, Sequential Product of Quantum Effects: An Overview, **INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 49 Issue: 12** (2010), 3118-3130
   Citeaza: A. Gheondea and S. Gudder, *Sequential product of quantum effects*, **Proceedings of the American Mathematical Society, 132** (2004), 503–512.

4. Bakonyi Mihaly; Lopushanskaya Ekaterina V. ,Moment Problems for Real Measures on the Unit Circle, **RECENT ADVANCES IN OPERATOR THEORY IN HILBERT AND KREIN SPACES Book Series: Operator Theory Advances and Applications Volume: 198** (2010), 49–60.

Citeaza:T. Constantinescu and A. Gheondea, *On the indefinite trigonometric problem of I. S. Iokhvidov and M. G. Krein*, **Mathematische Nachrichten, 171** (1995), pag. 79–94.

5. Michalik Lukasz; Jasinski Jerzy; Makowski Piotr L.; et al. , Problem of degree of polarization for photons , **PHOTONICS APPLICATIONS IN ASTRONOMY, COMMUNICATIONS, INDUSTRY, AND HIGH-ENERGY PHYSICS EXPERIMENTS 2010 Book Series: Proceedings of SPIE-The International Society for Optical Engineering Volume: 7745** (2010), Article Number: 77450K
Citeaza: T. Tudor and A. Gheondea, *Pauli algebraic forms of normal and non-normal operators*, **J. Opt. Soc. Amer. A 24** (2007), pag. 204-210.

Ghergu Marius

1. A. Kristaly, G. Moroanu, New competition phenomena in Dirichlet problems, **J. Math. Pures Appl. 94** (2010), 555–570. *Citeaza*: F. Cîrstea, M. Ghergu, V. Rădulescu, *Combined effects of asymptotically linear and singular nonlinearities in bifurcation problems of Lane-Emden-Fowler type*, **J. Math. Pures Appl. 84** (2005), pag. 493–508.

2. C.O. Alves, P.C. Carriao, L. Faria, Existence of solutions to singular elliptic equations with convection terms via the Galerkin method, **Electron. J. Differential Equations 12** (2010).

3. A. Mohammed, On ground state solutions to mixed type singular semi-linear elliptic equations, **Adv. Nonlinear Stud. 10** (2010), pag. 231–244. *Citeaza*: M. Ghergu, V. Rădulescu, Ground state solutions for the singular Lane-Emden-Fowler equation with sublinear convection term, **J. Math. Anal. Appl. 333** (2007), pag. 265–273.

4. X. Zhang, L. Liu, The existence and nonexistence of entire positive solutions of semilinear elliptic systems with gradient term, **J. Math. Anal. Appl. 371** (2010), pag. 300–308. *Citeaza*: M. Ghergu, C. Niculescu, V. Rădulescu, *Explosive solutions of elliptic equations with absorption and non-linear gradient term*, **Proc. Indian Acad. Sci. Math. Sci. 112** (2002), pag. 441–451

Gologan Radu

1. Badziahin, Dmitry A.; Haynes, Alan K. A note on Farey fractions with denominators in arithmetic progressions. **Acta Arith. 147 (2011)**,
Citeaza: Boca, F. P.; Gologan, R. N.; Zaharescu, A. Boca, Florin P.; Gologan, Radu N.; Zaharescu, Alexandru (The statistics of the trajectory of a certain billiard in a flat two-torus. (English summary) Comm. Math. Phys. 240 (2003), no. 1-2, 5373. *The average length of a trajectory in a certain billiard in a flat two-torus*, **New York J. Math. 9 (2003), 303330**

2. Marklof, Jens; Strömbergsson, Andreas, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems. **Ann. of Math. (2) 172 (2010)**, no. 3, 19492033 *Citeaza*: Boca, Florin P.(1-IL); Gologan, Radu N.(R-AOS); Zaharescu, Alexandru(1-IL) *The statistics of the trajectory of a certain billiard in a flat two-torus* **Comm. Math. Phys. 240 (2003)**, no. 1-2, 5373.

3. Haynes, Alan K. Numerators of differences of nonconsecutive Farey fractions. Int. J. Number Theory 6 (2010), no. 3, 655666. *Citeaza*: Boca, Florin P.; Gologan, Radu N.; Zaharescu, Alexandru *On the index of Farey sequences* **Q. J. Math. 53 (2002)**, no. 4, 377391.

Ignat Liviu

1. Marica, Aurora; Zuazua, Enrique, Localized solutions and filtering mechanisms for the discontinuous Galerkin semi-discretizations of the $1-d$ wave equation., **C. R. Math. Acad. Sci. Paris 348** (2010), no. 19-20, 10871092
Citeaza: Ignat, Liviu I.(R-AOS); Zuazua, Enrique, *Convergence of a two-grid algorithm for the control of the wave equation*, **J. Eur. Math. Soc. (JEMS) 11** (2009), no. 2, pag. 351391.

2. Gunzburger, Max; Lehoucq, R. B., A nonlocal vector calculus with application to nonlocal boundary value problems., **Multiscale Model. Simul. 8** (2010), no. 5, 1581–1598
Citeaza: Ignat, Liviu I.; Rossi, Julio D., *Decay estimates for nonlocal problems via energy methods.*, **J. Math. Pures Appl. (9) 92** (2009), no. 2, pag. 163187

3. Marica, Aurora; Zuazua, Enrique, Localized solutions and filtering mechanisms for the discontinuous Galerkin semi-discretizations of the $1-d$ wave equation., **C. R. Math. Acad. Sci. Paris 348** (2010), no. 19-20, 10871092
Citeaza: Ignat, Liviu I.; Zuazua, Enrique, *Numerical dispersive schemes for the nonlinear Schrödinger equation*, **SIAM J. Numer. Anal. 47 (2009)** (2009), no.2 pag. 13661390

4. Gunzburger, Max; Lehoucq, R. B., A nonlocal vector calculus with application to nonlocal boundary value problems., **Multiscale Model. Simul. 8** (2010), no. 5, 1581–1598
Citeaza: Ignat, Liviu I.; Rossi, Julio D., *A nonlocal convection-diffusion equation.*, **J. Funct. Anal. 251** (2007), no. 2, pag. 399–437

Leustean Laurentiu

1. J. Avigad, H. Towsner, Metastability in the Furstenberg-Zimmer tower, **Fundamenta Mathematicae 210** (2010), 243–268
Citeaza: U. Kohlenbach, L. Leuştean, *A quantitative Mean Ergodic Theorem for uniformly convex Banach spaces*, **Ergodic Theory and Dynamical Systems 29** (2009), 1907–1915.

2. A. Dvurecenskij, T. Kowalski, Multipotent GBL-algebras, **Algebra Universalis 64** (2010), 25–38
Citeaza: G. Georgescu, L. Leuştean, V. Preoteasa, *Pseudo-hoops*, **Journal of Multiple-Valued Logic and Soft Computing 11** (2005), 153–184.

3. A. Dvurecenskij, R. Giuntini, T. Kowalski, On the structure of pseudo-BL algebras and pseudo hoops in quantum logic, **Foundations of Physics 40** (2010), 1519–1542
Citeaza: G. Georgescu, L. Leuştean, V. Preoteasa *Pseudo-hoops*, **Journal of Multiple-Valued Logic and Soft Computing 11** (2005), 153–184.

4. R. Espínola, A. Fernández-León, B. Piatek, Fixed Points of Single- and Set-Valued Mappings in Uniformly Convex Metric Spaces with No Metric Convexity, **Fixed Point Theory and Applications 2010** (2010), Article ID 169837, 16 pages
Citeaza:

(a) U. Kohlenbach, L. Leuştean, *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces*, **Journal of the European Mathematical Society 12** (2010), 71–92.

(b) L. Leuştean, *Nonexpansive iterations in uniformly convex W-hyperbolic spaces*, in A. Leizarowitz, B. S. Mordukhovich, I. Shafrir, A. Zaslavski (Editors): Nonlinear Analysis and Optimization I: Nonlinear Analysis, Contemporary Mathematics 513 (2010), AMS, pag. 193–209.

(c) U. Kohlenbach, L. Leuştean, *The approximate fixed point property in product spaces*, **Nonlinear Analysis Series A: Theory, Methods & Applications 66** (2007), 806–818

5. A. Fernández-León, Existence and uniqueness of best proximity points in geodesic metric spaces, **Nonlinear Analysis: Theory, Methods & Applications 73** (2010), pag. 915–921
Citeaza: U. Kohlenbach, L. Leuştean, *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces*, **Journal of the European Mathematical Society 12** (2010), 71–92.

6. J. Rachunek, D. Salounova, Perfect residuated lattice ordered monoids, **Mathematica Slovaca 60** (2010), 823-838
Citeaza: G. Georgescu, L. Leuştean, *Some classes of pseudo-BL algebras*, **Journal of Australian Mathematical Society 73** (2002), 127–153.

Mihailescu Eugen

1. Y. Okuyama, Nonlinearity of morphisms in non-Archimedean and complex dynamics, **Michigan Mathematical Journal 59** (2010), 505 – 515
Citeaza: E. Mihailescu, *Periodic points for actions of tori in Stein manifolds*, **Mathematische Annalen 314** (1999), pag. 39 – 52

Nenciu Irina

1. Gamboa F.; Rouault A., Canonical Moments and Random Spectral Measures, **JOURNAL OF THEORETICAL PROBABILITY 23** (2010), 1015 – 1038
Citeaza: R. Killip, I. Nenciu, *Matrix models for circular ensembles*, **Int. Math. Rec. Not. 50 (2004)**, pag. 2665–2701

Nenciu Gheorghe

1. Jaeck T., Zagrebnov V. A., Exactness of the Bogoliubov approximation in random external potentials, **JOURNAL OF MATHEMATICAL PHYSICS 51** (2010), Article Number: 123306
Citeaza: N. Angelescu, G. Nenciu , *Independence of thermodynamic limit on Boundary conditions in quantum statistical mechanics*, **COMMUNICATIONS IN MATHEMATICAL PHYSICS 29** (1973) , 15-30 .

2. Lein M., Two-parameter asymptotics in magnetic Weyl calculus , **JOURNAL OF MATHEMATICAL PHYSICS 51** (2010), Article Number: 123519
Citeaza: Grigore D. R., Nenciu G., Purice R., *On the nonrelativistic limit of the Dirac hamiltonian*, **ANNALES DE L INSTITUT HENRI POINCARE-PHYSIQUE THEORIQUE 51** (1989) , 231-263 .

3. Noffsinger J., Giustino F., Malone B., D.; et al., EPW: A program for calculating the electron-phonon coupling using maximally localized Wannier functions , **COMPUTER PHYSICS COMMUNICATIONS 181** (2010), 2140-2148
Citeaza: G. Nenciu, *Existence of the exponentially localised Wannier functions*, **Comm. Math. Phys. 91** (1983) 81–85.

4. Asch J., Meresse C., A constant of quantum motion in two dimensions in crossed magnetic and electric fields , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474002
Citeaza: G. Nenciu, *On asymptotic perturbation theory for quantum mechanics: almost invariant subspaces and gauge invariant magnetic perturbation theory*, **J. Math. Phys. 43** (2002), 1273–1298.

5. Briet P., Cornean H. D., Savoie B., Diamagnetism of quantum gases with singular potentials , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474008
Citeaza:Cornean H.D., G. Nenciu, *On eigenfunction decay for two dimensional magnetic Schrodinger operators* , **COMMUNICATIONS IN MATHEMATICAL PHYSICS 192** (1998), 671-685.

6. Briet P., Cornean H. D., Savoie B., Diamagnetism of quantum gases with singular potentials , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474008
Citeaza:Cornean H.D., G. Nenciu, *The Faraday effect revisited: Thermodynamic limit*, **JOURNAL OF FUNCTIONAL ANALYSIS 257** (2009), 2024-2066.

7. Cacciapuoti Claudio, Carlone Raffaele, Figari Rodolfo, Perturbations of eigenvalues embedded at threshold: I. One- and three-dimensional solvable models , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474009
Citeaza: A. Jensen, G. Nenciu , *A unified approach to resolvent expansions at thresholds*, **REVIEWS IN MATHEMATICAL PHYSICS, 13** (2001) , 717-754.

8. Cacciapuoti Claudio, Carlone Raffaele, Figari Rodolfo, Perturbations of eigenvalues embedded at threshold: I. One- and three-dimensional solvable models , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474009
Citeaza: A. Jensen, G. Nenciu, *The Fermi Golden Rule and its form at thresholds in odd dimensions* , **COMMUNICATIONS IN MATHEMATICAL PHYSICS 261** (2006), 693-727.

9. Cacciapuoti Claudio, Carlone Raffaele, Figari Rodolfo, Perturbations of eigenvalues embedded at threshold: I. One- and three-dimensional solvable models , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474009
Citeaza: V. Dinu, A. Jensen, G. Nenciu, *Nonexponential decay laws in perturbation theory of near threshold eigenvalues* , **JOURNAL OF MATHEMATICAL PHYSICS 50** (2009), Article Number: 013516 .

10. Combes Jean-Michel; Germinet Francois; Hislop Peter D., Conductivity and the current-current correlation measure , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474010
Citeaza:Cornean H.D., G. Nenciu, Pedersen TG *The Faraday effect revisited: General theory* , **JOURNAL OF MATHEMATICAL PHYSICS 47** (2006), Article Number: 013511.

11. Cornean H. D.,Gianesello Celine; Zagrebnov Valentin , A partition-free approach to transient and steady-state charge currents , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474011
Citeaza:Cornean H.D.,Duclos P., G. Nenciu, *Adiabatically switched-on electrical bias and the Landauer-Buttiker formula* , **JOURNAL OF MATHEMATICAL PHYSICS 49** (2008), Article Number:102106 .

12. Faraj A.; Mantile A.; Nier F., An explicit model for the adiabatic evolution of quantum observables driven by 1D shape resonances , **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43** (2010), Article Number: 474025
Citeaza:Cornean H.D.,Duclos P., G. Nenciu, *Adiabatically switched-on electrical bias and the Landauer-Buttiker formula* , **JOURNAL OF MATHEMATICAL PHYSICS 49** (2008), Article Number:102106 .

13. Rezakhani A. T.; Pimachev A. K.; Lidar D. A., Accuracy versus run time in an adiabatic quantum search , **PHYSICAL REVIEW A 82** (2010), Article Number: 052305
Citeaza: G. Nenciu, *Linear adiabatic theory-exponential estimates*, **Commun. Math. Phys.152** (1993), pag. 479-496.

14. Cornean H. D. , On the Lipschitz Continuity of Spectral Bands of Harper-Like and Magnetic Schrodinger Operators , **ANNALES HENRI POINCARE 11** (2010), 973-990
Citeaza:Cornean H.D., G. Nenciu, *Two dimensional magnetic Schrodinger operators: Width of mini bands in the tight binding approximation*,
ANNALES HENRI POINCARE 1 (2000), 203-222 .

15. Cornean H. D. , On the Lipschitz Continuity of Spectral Bands of Harper-Like and Magnetic Schrodinger Operators , **ANNALES HENRI POINCARE 11** (2010), 973-990
Citeaza:Cornean H.D., G. Nenciu, *On eigenfunction decay for two dimensional magnetic Schrodinger operators* , **COMMUNICATIONS IN MATHEMATICAL PHYSICS 192** (1998), 671-685.

16. Cornean H. D. , On the Lipschitz Continuity of Spectral Bands of Harper-Like and Magnetic Schrodinger Operators , **ANNALES HENRI POINCARE 11** (2010), 973-990
Citeaza:Cornean H.D., G. Nenciu, Pedersen TG *The Faraday effect revisited: General theory* , **JOURNAL OF MATHEMATICAL PHYSICS 47** (2006), Article Number: 013511.

17. Cornean H. D. , On the Lipschitz Continuity of Spectral Bands of Harper-Like and Magnetic Schrodinger Operators , **ANNALES HENRI POINCARE 11** (2010), 973-990
Citeaza:Cornean H.D., G. Nenciu, *The Faraday effect revisited: Thermodynamic limit* , **JOURNAL OF FUNCTIONAL ANALYSIS 257** (2009), 2024-2066.

18. Cornean H. D. , On the Lipschitz Continuity of Spectral Bands of Harper-Like and Magnetic Schrodinger Operators , **ANNALES HENRI POINCARE 11** (2010), 973-990
Citeaza: G. Nenciu, *On asymptotic perturbation theory for quantum mechanics: almost invariant subspaces and gauge invariant magnetic perturbation theory*, **J. Math. Phys. 43 (2002)**, 1273–1298.

19. Cornean H. D. , On the Lipschitz Continuity of Spectral Bands of Harper-Like and Magnetic Schrodinger Operators , **ANNALES HENRI POINCARE 11** (2010), 973-990
Citeaza: G. Nenciu, *Stability of energygaps under variations of the magnetic field*, **LETTERS IN MATHEMATICAL PHYSICS 11** (1986), 127-132.

20. Viennot David , Holonomy of a principal composite bundle connection, non-Abelian geometric phases, and gauge theory of gravity , **JOURNAL OF MATHEMATICAL PHYSICS 51** (2010), Article Number: 103501
Citeaza: G. Nenciu, *Adiabatic theorem of quantum mechanics*, **JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 13** (1980), L15-L18 .

21. Shiu Ruei-Cheng; Lan Yung-Chiang; Chen chin-Min, Plasmonic Bloch oscillations in cylindrical metal-dielectric waveguide arrays , **OPTICS LETTERS 35** (2010), 4012-4014
Citeaza: G. Nenciu, *Dynamics of band electrons in electric and magnetic fields: Rigorous justification of the effective hamiltonians*, **Rev. Mod. Phys, 63 (1991)**,91-128.

Pascu Mihai

1. Viorel Iftimie, Marius Mantoiu, Radu Purice, Unicity of the Integrated Density of States for Relativistic Schrdinger Operators with Regular Magnetic Fields and Singular Electric Potentials, **Integral Equations and Operator Theory 67, 2** (2010), 215 – 240
Citeaza: Mihai Pascu, *On the essential spectrum of the relativistic magnetic Schr"odinger operator*, **Osaka Journal of Mathematics 39, 4** (2002), pag. 963 –978

Polisevschi Dan

1. Donato Patrizia, Andrey Piatnitski, On the effective interfacial resistance through rough surfaces, **Communications on Pure and Applied Analysis 9(5)** (2010), 1295–1310
Citeaza: H.I. Ene, D. Poliševki, *Model of diffusion in partially fissured media*, **J. Appl. Math. Phys. (ZAMP), 53(6)** (2002), 1052–1059

2. Claudia Timofte, Multiscale analysis in nonlinear thermal diffusion problems in composite structures, **Central European Journal of Physics 8(4)** (2010), 555–561
Citeaza: H.I. Ene, D. Poliševki, *Model of diffusion in partially fissured media*, **J. Appl. Math. Phys. (ZAMP), 53(6)** (2002), 1052–1059

Pop Ciprian

1. Helemskii, A. Ya., *Extreme flatness of normed modules and Arveson-Wittstock type theorems*, **J. Operator Theory 64 (2010)**, no. 1, 171-188. *Citeaza*: Pop, Ciprian. *Bimodules normés représentables sur des espaces hilbertiens* **Operator theoretical methods (Timişoara, 1998)**,331–370.

Popa A. Alexandru

1. Breuillard, E., Équidistribution des orbites toriques sur les espaces homogènes (d'après M. Einsiedler, E. Lindenstrauss, Ph. Michel, A. Venkatesh), **Astérisque 332** (2010), 305 – 339
   Citeaza: A. A. Popa, *Central values of Rankin L-series over real quadratic fields,* **Compos. Math. 142** (2006), 811866.

2. Zhao, Peng, Quantum Variance of Maass-Hecke Cusp Forms, **Communications in mathematical physics 297**, (2010), 475-514
   Citeaza: A. A. Popa, *Central values of Rankin L-series over real quadratic fields,* **Compos. Math. 142** (2006), 811866.

Popescu Dorin - Fasel, Jean Some remarks on orbit sets of unimodular rows. Comment. Math. Helv. 86 (2011), no. 1, 1339, 13C10 (14F43 19A13 19G38)

1. Kashiwara, Masaki; Vilonen, Kari, On the codimension-three conjecture, **Proc. Japan Acad. Ser. A Math. Sci. 86** (2010), pag. 154-158
   Citeaza: Dorin Popescu, *On a Question of Quillen*, **Bull. Math. Soc. Sci. Roum., lucrare citata 45(93)** (2002), pag. 209- -212

2. Etingof, Pavel; Ginzburg, Victor, Noncommutative del Pezzo surfaces and Calabi-Yau algebras, **J. Eur. Math. Soc. (JEMS) 12** (2010), 1371– 1416
   Citeaza: Laza, Radu; Pfister, Gerhard; Popescu, Dorin, *Maximal Cohen-Macaulay modules over the cone of an elliptic curve*, **J. Algebra 253** (2002), pag. 209 – 236

3. Takahashi, Ryo, Classifying thick subcategories of the stable category of Cohen-Macaulay modules, **Adv. Math. 225** (2010), 2076– 2116
   Citeaza: O'Carroll, Liam; Popescu, Dorin, *On a theorem of Knoerrer concerning Cohen-Macaulay modules*, **J. Pure Appl. Algebra 152** (2000), pag. 293 – 302

4. Scheiderer, Claus, Weighted sums of squares in local rings and their completions, II, **Math. Z 266** (2010), 21– 42
   Citeaza: Popescu, Dorin, *Artin approximation*, **Handbook of Algebra, North-Holand 2** (2000), pag. 321 – 356

5. Fasel, Jean, Some remarks on orbit sets of unimodular rows, **Comment. Math. Helv. 86** (2010), pag. 13- 39
   Citeaza: Dorin Popescu, *On a Question of Quillen*, **Bull. Math. Soc. Sci. Roum., 45(93)** (2002), pag. 209- -212

6. Lamel, Bernhard; Mir, Nordine, Holomorphic versus algebraic equivalence for deformations of real-algebraic Cauchy-Riemann manifolds, **Comm. Anal. Geom. 18** (2010), pag. 891-925
   Citeaza: Dorin Popescu, *General Nron desingularization and approximation*, **Nagoya Math. J 104** (1986), pag. 85-115

7. Panin, Ivan; Pimenov, Konstantin, Rationally isotropic quadratic spaces are locally isotropic II, **Doc. Math. Extra volume, Suslin sixtieth birthday** (2010), pag. 515-523
   Citeaza: Dorin Popescu, *General Nron desingularization and approximation*, **Nagoya Math. J 104** (1986), pag. 85-115

Popescu Ionel

1. N. Gozlan, C. Leonard, Transport inequalities - A survey, **Markov Processes and Related Fields** 16 (2010), 635-736
   Citeaza: M.Ledoux, I. Popescu, *Mass transportation proofs of free functional inequalities, and free Poincaré inequalities*, **Journal of Functional Analysis** 257, (2009) 1175-1221

Purice Radu

1. Berlyand, L.; Rybalko, V: Solutions with vortices of a semi-stiff boundary value problem for the Ginzburg-Landau equation, **J. Eur. Math. Soc. (JEMS) 12** (2010), 1497 – 1531
   Citeaza: Boutet de Monvel Berthier A, Georgescu V, **Purice R**, *A boundary value problem related to the Ginzburg-Landau model*, **Communications in Mathematical Physics 142** (1991), pag. 1 – 21

2. Cornean, Horia D.: On the Lipschitz continuity of spectral bands of Harper-like and magnetic Schrdinger operators, **Ann. Henri Poincaré 11** (2010), 973 – 990
   Citeaza: Măntoiu, M.; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

3. Lein, Max: Two-parameter asymptotics in magnetic Weyl calculus, **J. Math. Phys. 51** (2010), no. 12, 123519, 34 pp
   Citeaza: Măntoiu, M.; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

4. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788
   Citeaza: Măntoiu, M; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

5. Cornean, Horia D.: On the Lipschitz continuity of spectral bands of Harper-like and magnetic Schrödinger operators, **Ann. Henri Poincaré 11** (2010), 973 – 990
   Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

6. Lein, Max: Two-parameter asymptotics in magnetic Weyl calculus, **J. Math. Phys. 51** (2010), no. 12, 123519, 34 pp
   Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

7. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788
   Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

8. Daud, Thierry: Time-dependent scattering theory for charged Dirac fields on a Reissner-Nordström black hole, **J. Math. Phys. 51** (2010), no. 10, 102504, 57 pp.
   Citeaza: Boutet de Monvel-Berthier, Anne; Manda, Dragos; **Purice, Radu**:, *Limiting absorption principle for the Dirac operator*, **Ann. Inst. H. Poincaré Phys. Théor. 58** (1993), pag. 413 – 431.

9. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788.
Citeaza: Amrein, W. O.; Măntoiu, M.; **Purice, R.**: *Propagation properties for Schrdinger operators affiliated with certain C^*-algebras*, **Ann. Henri Poincaré 3** (2002), pag. 1215 – 1232.

10. Cornean, Horia D.: On the Lipschitz continuity of spectral bands of Harper-like and magnetic Schrdinger operators, **Ann. Henri Poincaré 11** (2010), 973 – 990
Citeaza: Măntoiu, Marius; **Purice, Radu**; Richard, Serge:, *Spectral and propagation results for magnetic Schrdinger operators; a C^*-algebraic framework*, **J. Funct. Anal. 250** (2007), pag. 42 – 67.

11. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788
Citeaza: Măntoiu, Marius; **Purice, Radu**; Richard, Serge:, *Spectral and propagation results for magnetic Schrdinger operators; a C^*-algebraic framework*, **J. Funct. Anal. 250** (2007), pag. 42 – 67.

12. Cornean, Horia D.: On the Lipschitz continuity of spectral bands of Harper-like and magnetic Schrödinger operators, **Ann. Henri Poincaré 11** (2010), 973 – 990
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *Strict deformation quantization for a particle in a magnetic field*, **J. Math. Phys. 46** (2005), no. 5, 052105, 15 pp.

13. Lein, Max: Two-parameter asymptotics in magnetic Weyl calculus, **J. Math. Phys. 51** (2010), no. 12, 123519, 34 pp
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *Strict deformation quantization for a particle in a magnetic field*, **J. Math. Phys. 46** (2005), no. 5, 052105, 15 pp.

14. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *Strict deformation quantization for a particle in a magnetic field*, **J. Math. Phys. 46** (2005), no. 5, 052105, 15 pp.

15. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788
Citeaza: Măntoiu, Marius; **Purice, Radu**; Richard, Serge:, *Twisted crossed products and magnetic pseudodifferential operators*, Advances in operator algebras and mathematical physics, 137 – 172, **Theta Ser. Adv. Math., 5**, Theta, Bucharest, 2005.

16. Fakhri, H.; Mojaveri, B.; Gomshi Nobary, M. A.: Landau levels as a limiting case of a model with the Morse-like magnetic field, **Rep. Math. Phys. 66** (2010), 299 – 310
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *Some propagation properties of the Iwatsuka model*, **Comm. Math. Phys. 188**, (1997), 691 – 708.

17. Lein, Max: Two-parameter asymptotics in magnetic Weyl calculus, **J. Math. Phys. 51** (2010), no. 12, 123519, 34 pp
Citeaza: Grigore, D. R.; Nenciu, G.; **Purice, R.**:, *On the nonrelativistic limit of the Dirac Hamiltonian*, **Ann. Inst. H. Poincaré Phys. Théor. 51** (1989), 231 – 263.

18. Matte, Oliver; Stockmeyer, Edgardo: Spectral theory of no-pair Hamiltonians, **Rev. Math. Phys. 22** (2010), 1 – 53
Citeaza: Boutet de Monvel, Anne Marie; **Purice, Radu**:, *A distinguished self-adjoint extension for the Dirac operator with strong local singularities and arbitrary behaviour at infinity*, **Rep. Math. Phys. 34** (1994), 351 – 360.

19. Lein, Max: Two-parameter asymptotics in magnetic Weyl calculus, **J. Math. Phys. 51** (2010), no. 12, 123519, 34 pp
Citeaza: Iftimie, Viorel; Măntoiu, Marius; **Purice, Radu**:, *Commutator criteria for magnetic pseudodifferential operators*, **Comm. Partial Differential Equations 35** (2010), 1058 – 1094.

20. Lein, Max; Măntoiu, Marius; Richard, Serge: Magnetic pseudodifferential operators with coefficients in C^*-algebras, **Publ. Res. Inst. Math. Sci. 46** (2010), 755 – 788
Citeaza: Iftimie, Viorel; Măntoiu, Marius; **Purice, Radu**:, *Commutator criteria for magnetic pseudodifferential operators*, **Comm. Partial Differential Equations 35** (2010), 1058 – 1094.

21. Cornean Horia D.; Nenciu Gheorghe: Faraday effect revisited: sum rules and convergence issues, **J. Phys. A: Mathematical and Theoretical 43** (2010), Article Number: 474012 DOI: 10.1088/1751-8113/43/47/474012 Published: NOV 26 2010
Citeaza: Măntoiu, M; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

22. Cornean Horia D.; Nenciu Gheorghe: Faraday effect revisited: sum rules and convergence issues, **J. Phys. A: Mathematical and Theoretical 43** (2010), Article Number: 474012 DOI: 10.1088/1751-8113/43/47/474012 Published: NOV 26 2010
Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

23. Cornean Horia D.; Nenciu Gheorghe: Faraday effect revisited: sum rules and convergence issues, **J. Phys. A: Mathematical and Theoretical 43** (2010), Article Number: 474012 DOI: 10.1088/1751-8113/43/47/474012 Published: NOV 26 2010
Citeaza: Măntoiu, Marius; **Purice, Radu**; Richard, Serge:, *Spectral and propagation results for magnetic Schrödinger operators; a C^*-algebraic framework*, **J. Funct. Anal. 250** (2007), pag. 42 – 67.

24. Cornean Horia D.; Nenciu Gheorghe: Faraday effect revisited: sum rules and convergence issues, **J. Phys. A: Mathematical and Theoretical 43** (2010), Article Number: 474012 DOI: 10.1088/1751-8113/43/47/474012 Published: NOV 26 2010
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *Strict deformation quantization for a particle in a magnetic field*, **J. Math. Phys. 46** (2005), no. 5, 052105, 15 pp.

Ramazan Birant

1. Deaconu, Valentin, C?-algebras and Fell bundles associated to a textile system, **J. Math. Anal. Appl. 372** (2010), no. 2, pag. 515–524.
Citeaza: V. Deaconu, A. Kumjian, B. Ramazan, *Fell bundles associated to groupoid morphisms*, **Math. Scand. 102 (2)** (2008), pag. 305–319

2. Kaliszewski, S.; Muhly, Paul S.; Quigg, John; Williams, Dana P., Coactions and Fell bundles., **New York J. Math. 16** (2010), 315–359.
Citeaza: V. Deaconu, A. Kumjian, B. Ramazan, *Fell bundles associated to groupoid morphisms*, **Math. Scand. 102 (2)** (2008), pag. 305–319

Radulescu Vicentiu

1. Zhang, Zhijun, Boundary behavior of large solutions to semilinear elliptic equations with nonlinear gradient terms, **Nonlinear Anal. 73** (2010), 3348 – 3363
Citeaza: F. Cirstea, V. Rădulescu, *Uniqueness of the blow-up boundary solution of logistic equations with absorption*, **C. R. Math. Acad. Sci. Paris 335** (2002), pag. 447 – 452.

2. Feng, Huabing; Zhong, Chengkui, Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3472 – 3478
Citeaza: F. Cirstea, V. Rădulescu, *Uniqueness of the blow-up boundary solution of logistic equations with absorption*, **C. R. Math. Acad. Sci. Paris 335** (2002), pag. 447 – 452.

3. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: F. Cirstea, V. Rădulescu, *Uniqueness of the blow-up boundary solution of logistic equations with absorption*, **C. R. Math. Acad. Sci. Paris 335** (2002), pag. 447 – 452.

4. Xiang, Ni Boundary asymptotical behavior of large solutions to complex Hessian equations, **Nonlinear Anal. 73** (2010), 3940 – 3946
Citeaza: F. Cirstea, V. Rădulescu, *Uniqueness of the blow-up boundary solution of logistic equations with absorption*, **C. R. Math. Acad. Sci. Paris 335** (2002), pag. 447 – 452.

5. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

6. Bocea, Marian; Mihailescu, Mihai; Popovici, Cristina On the asymptotic behavior of variable exponent power-law functionals and applications, **Ric. Mat. 59** (2010), 207 – 238
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

7. Zhang, Xia; Fu, Yongqiang Bifurcation results for a class of $p(x)$-Laplacian equations, **Nonlinear Anal. 73** (2010), 3641 – 3650
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

8. Alves, Claudianor O.; Liu, Shibo On superlinear $p(x)$-Laplacian equations in $\mathbf{R}^N$, **Nonlinear Anal. 73** (2010), 2566 – 2579
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

9. Mihailescu, Mihai; Morosanu, Gheorghe On an eigenvalue problem for an anisotropic elliptic equation involving variable exponents, **Glasg. Math. J. 52** (2010), 517 – 527
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

10. Fan, Xianling Positive solutions to $p(x)$-LaplacianDirichlet problems with sign-changing non-linearities, **Glasg. Math. J. 52** (2010), 505 – 516
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

11. Mashiyev, Rabil A.; Ogras, Sezai; Yucedag, Zehra; Avci, Mustafa The Nehari manifold approach for Dirichlet problem involving the $p(x)$-Laplacian equation, **J. Korean Math. Soc. 47** (2010), 845 – 860
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

12. Fan, Xianling Positive solutions to $p(x)$-LaplacianDirichlet problems with sign-changing non-linearities, **Glasg. Math. J. 52** (2010), 505 – 516
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

13. Mihailescu, Mihai; Morosanu, Gheorghe On an eigenvalue problem for an anisotropic elliptic equation involving variable exponents, **Glasg. Math. J. 52** (2010), 517 – 527
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

14. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

15. Zhang, Xinguang; Liu, Lishan The existence and nonexistence of entire positive solutions of semilinear elliptic systems with gradient term, **J. Math. Anal. Appl. 371** (2010), 300 – 308
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

16. Ben Dkhil, A.; Zeddini, N. Existence of positive solutions for some nonlinear parabolic systems in exteriors domains, **J. Math. Anal. Appl. 371** (2010), 363 – 371
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

17. Zhang, Zhijun Boundary behavior of large solutions to semilinear elliptic equations with nonlinear gradient terms, **Nonlinear Anal. 73** (2010), 3348 – 3363
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

18. Hamydy, Ahmed Existence and uniqueness of nonnegative solutions for a boundary blow-up problem, **J. Math. Anal. Appl. 371** (2010), 534 – 545
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

19. Feng, Huabing; Zhong, Chengkui Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3472 – 3478
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

20. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

21. Agarwal, Ravi P.; Ghaemi, M. B.; Saiedinezhad, S. The Nehari manifold for the degenerate p-Laplacian quasilinear elliptic equations, **Adv. Math. Sci. Appl. 20** (2010), 37 – 50
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

22. Ma, Ruyun; Li, Jiemei Existence of positive solutions of a singular nonlinear boundary value problem, **Bound. Value Probl. 2010, Art. ID 458015** (2010), 16 pp.
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

23. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic*

analysis, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

24. Gontara, Sabrine; Maagli, Habib; Masmoudi, Syrine; Turki, Sameh Asymptotic behavior of positive solutions of a singular nonlinear Dirichlet problem, **J. Math. Anal. Appl. 369** (2010), 719 – 729
Citeaza: F. Cirstea, V. Rădulescu, *Existence and uniqueness of blow-up solutions for a class of logistic equations*, **Commun. Contemp. Math. 4** (2002), pag. 559 – 586.

25. Zhang, Zhijun Boundary behavior of large solutions to semilinear elliptic equations with nonlinear gradient terms, **Nonlinear Anal. 73** (2010), 3348 – 3363
Citeaza: F. Cirstea, V. Rădulescu, *Existence and uniqueness of blow-up solutions for a class of logistic equations*, **Commun. Contemp. Math. 4** (2002), pag. 559 – 586.

26. Feng, Huabing; Zhong, Chengkui Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3472 – 3478
Citeaza: F. Cirstea, V. Rădulescu, *Existence and uniqueness of blow-up solutions for a class of logistic equations*, **Commun. Contemp. Math. 4** (2002), pag. 559 – 586.

27. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: F. Cirstea, V. Rădulescu, *Existence and uniqueness of blow-up solutions for a class of logistic equations*, **Commun. Contemp. Math. 4** (2002), pag. 559 – 586.

28. Xiang, Ni Boundary asymptotical behavior of large solutions to complex Hessian equations, **Nonlinear Anal. 73** (2010), 3940 – 3946
Citeaza: F. Cirstea, V. Rădulescu, *Existence and uniqueness of blow-up solutions for a class of logistic equations*, **Commun. Contemp. Math. 4** (2002), pag. 559 – 586.

29. Mihailescu, Mihai; Morosanu, Gheorghe On an eigenvalue problem for an anisotropic elliptic equation involving variable exponents, **Glasg. Math. J.** (2010), 517 – 527
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

30. Fan, Xianling On nonlocal $p(x)$-Laplacian equations, **Nonlinear Anal. 73** (2010), 3364 – 3375
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

31. Fan, Xianling Local boundedness of quasi-minimizers of integral functions with variable exponent anisotropic growth and applications, **NoDEA Nonlinear Differential Equations Appl. 17** (2010), 619 – 637
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

32. Bocea, Marian; Mihailescu, Mihai; Popovici, Cristina On the asymptotic behavior of variable exponent power-law functionals and applications, **Ric. Mat. 59** (2010), 207–238
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

33. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875– 889
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

34. Namlyeyeva, Yu. V.; Shishkov, A. E.; Skrypnik, I. I. Removable isolated singularities for solutions of doubly nonlinear anisotropic parabolic equations, **Appl. Anal. 89** (2010), 1559 – 1574
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

35. Carl, Siegfried; Motreanu, Dumitru Multiple and sign-changing solutions for the multivalued p-Laplacian equation, **Math. Nachr. 283** (2010), 965 – 981
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

36. Bonanno, Gabriele; Buccellato, Stefania Maria Two point boundary value problems for the Sturm-Liouville equation with highly discontinuous nonlinearities, **Taiwanese J. Math. 14** (2010), 2059 – 2072
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

37. D'Agui, Giuseppina; Molica Bisci, Giovanni Infinitely many solutions for perturbed hemivariational inequalities, **Bound. Value Probl. 2010, Art. ID 363518** (2010), 19 pag.
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

38. Feng, Huabing; Zhong, Chengkui Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3472 – 3478
Citeaza: F. Cirstea, V. Rădulescu, *Asymptotics for the blow-up boundary solution of the logistic equation with absorption*, **C. R. Math. Acad. Sci. Paris 336** (2003), pag. 231 – 236.

39. Mihailescu, Mihai; Morosanu, Gheorghe On an eigenvalue problem for an anisotropic elliptic equation involving variable exponents, **Glasg. Math. J. 52** (2010), 517 – 527

Citeaza: M. Mihailescu, V. Rădulescu, *Continuous spectrum for a class of nonhomogeneous differential operators*, **Manuscripta Math. 125** (2008), pag. 157 – 167.

40. Fan, Xianling Positive solutions to $p(x)$-LaplacianDirichlet problems with sign-changing non-linearities, **Glasg. Math. J. 52** (2010), 505 – 516
Citeaza: M. Mihailescu, V. Rădulescu, *Continuous spectrum for a class of nonhomogeneous differential operators*, **Manuscripta Math. 125** (2008), pag. 157 – 167.

41. Zhang, Qihu; Guo, Yunrui; Chen, Guangxia Existence and multiple solutions for a variable exponent system, **Nonlinear Anal. 73** (2010), 3788 – 3804
Citeaza: M. Mihailescu, V. Rădulescu, *Continuous spectrum for a class of nonhomogeneous differential operators*, **Manuscripta Math. 125** (2008), pag. 157 – 167.

42. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Mihailescu, V. Rădulescu, *Continuous spectrum for a class of nonhomogeneous differential operators*, **Manuscripta Math. 125** (2008), pag. 157 – 167.

43. Zhang, Peng; Liao, Jia-Feng Existence and nonexistence results for classes of singular elliptic problem, **Abstr. Appl. Anal. 2010, Art. ID 435083** (2010), 10pp.
Citeaza: M. Ghergu, V. Rădulescu, *Sublinear singular elliptic problems with two parameters*, **J. Differential Equations 195** (2003), pag. 520 – 536.

44. Peterson, Jesse; Smith, David; Wood, Aihua W. Large solutions of coupled sublinear/superlinear elliptic equations, **Appl. Anal. 89** (2010), 905 – 914
Citeaza: F. Cirstea, V. Rădulescu, *Blow-up boundary solutions of semilinear elliptic problems*, **Nonlinear Anal. 48** (2002), pag. 521 – 534.

45. Feng, Huabing; Zhong, Chengkui Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3471 – 3478
Citeaza: F. Cirstea, V. Rădulescu, *Blow-up boundary solutions of semilinear elliptic problems*, **Nonlinear Anal. 48** (2002), pag. 521 – 534.

46. Goncalves, J. V. A.; Zhou, Jiazheng Remarks on existence of large solutions for p-Laplacian equations with strongly nonlinear terms satisfying the Keller-Osserman condition, **Adv. Nonlinear Stud. 10** (2010), 757 – 769
Citeaza: F. Cirstea, V. Rădulescu, *Blow-up boundary solutions of semilinear elliptic problems*, **Nonlinear Anal. 48** (2002), pag. 521 – 534.

47. Miao, Qing; Yang, Zuodong Boundary blow-up solutions for a class of quasilinear elliptic equations, **Appl. Anal. 89** (2010), 1893 – 1905
Citeaza: F. Cirstea, V. Rădulescu, *Blow-up boundary solutions of semilinear elliptic problems*, **Nonlinear Anal. 48** (2002), pag. 521 – 534.

48. Feng, Huabing; Zhong, Chengkui Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3472 – 3478

Citeaza: F. Cirstea, V. Rădulescu, *Nonlinear problems with boundary blow-up: a Karamata regular variation theory approach*, **Asymptot. Anal. 46** (2006), pag. 275 – 298.

49. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: F. Cirstea, V. Rădulescu, *Nonlinear problems with boundary blow-up: a Karamata regular variation theory approach*, **Asymptot. Anal. 46** (2006), pag. 275 – 298.

50. Xiang, Ni Boundary asymptotical behavior of large solutions to complex Hessian equations, **Nonlinear Anal. 73** (2010), 3940 – 3946
Citeaza: F. Cirstea, V. Rădulescu, *Nonlinear problems with boundary blow-up: a Karamata regular variation theory approach*, **Asymptot. Anal. 46** (2006), pag. 275 – 298.

51. Fan, Xianling On nonlocal $p(x)$-Laplacian equations, **Nonlinear Anal. 73** (2010), 3363 – 3375
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Nonhomogeneous boundary value problems in anisotropic Sobolev spaces*, **C. R. Math. Acad. Sci. Paris 345** (2007), pag. 561 – 566.

52. Fan, Xianling Local boundedness of quasi-minimizers of integral functions with variable exponent anisotropic growth and applications, **NoDEA Nonlinear Differential Equations Appl. 17** (2010), 619 – 637
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Nonhomogeneous boundary value problems in anisotropic Sobolev spaces*, **C. R. Math. Acad. Sci. Paris 345** (2007), pag. 561 – 566.

53. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Nonhomogeneous boundary value problems in anisotropic Sobolev spaces*, **C. R. Math. Acad. Sci. Paris 345** (2007), pag. 561 – 566.

54. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: F. Cirstea, V. Rădulescu, *Extremal singular solutions for degenerate logistic-type equations in anisotropic media*, **C. R. Math. Acad. Sci. Paris 339** (2004), pag. 119 – 124.

55. Loc, Nguyen Hoang; Schmitt, Klaus Boundary value problems for singular elliptic equations, **Rocky Mountain J. Math. 41** (2011), 555 – 572
Citeaza: F. Cirstea, M. Ghergu, V. Rădulescu, *Combined effects of asymptotically linear and singular nonlinearities in bifurcation problems of Lane-Emden-Fowler type*, **J. Math. Pures Appl. (9) 84** (2005), pag. 493 – 508.

56. Kristály, Alexandru; Morosanu, Gheorghe, New competition phenomena in Dirichlet problems, **J. Math. Pures Appl. (9) 94** (2010), 555 – 570
Citeaza: F. Cirstea, M. Ghergu, V. Rădulescu, *Combined effects of asymptotically linear and singular nonlinearities in bifurcation problems of Lane-Emden-Fowler type*, **J. Math. Pures Appl. (9) 84** (2005), pag. 493 – 508.

57. Zhang, Xinguang; Liu, Lishan The existence and nonexistence of entire positive solutions of semilinear elliptic systems with gradient term, **J. Math. Anal. Appl. 371** (2010), 300 – 308
Citeaza: F. Cirstea, V. Rădulescu, *Entire solutions blowing up at infinity for semilinear elliptic systems*, **J. Math. Pures Appl. (9) 81** (2002), pag. 827 – 846.

58. Ben Dkhil, A.; Zeddini, N. Existence of positive solutions for some nonlinear parabolic systems in exteriors domains, **J. Math. Anal. Appl. 371** (2010), 363 – 371
Citeaza: F. Cirstea, V. Rădulescu, *Entire solutions blowing up at infinity for semilinear elliptic systems*, **J. Math. Pures Appl. (9) 81** (2002), pag. 827 – 846.

59. Miao, Qing; Yang, Zuodong Boundary blow-up solutions for a class of quasilinear elliptic equations, **Appl. Anal. 89** (2010), 1893 – 1905
Citeaza: F. Cirstea, V. Rădulescu, *Solutions with boundary blow-up for a class of nonlinear elliptic problems*, **Houston J. Math. 29** (2003), pag. 821 – 829.

60. Ben Dkhil, A.; Zeddini, N. Existence of positive solutions for some nonlinear parabolic systems in exteriors domains, **J. Math. Anal. Appl. 371** (2010), 363 – 371
Citeaza: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467 – 475.

61. Hamydy, Ahmed Existence and uniqueness of nonnegative solutions for a boundary blow-up problem, **J. Math. Anal. Appl. 371** (2010), 534 – 545
Citeaza: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467 – 475.

62. Chen, Caisheng; Wang, Zhenqi; Wang, Fengping Existence and nonexistence of positive solutions for singular p-Laplacian equation in $\mathbb{R}^N$, **Bound. Value Probl. 2010, Art. ID 607453** (2010), 17 pp.
Citeaza: F. Cirstea, D. Motreanu, V. Rădulescu, *Weak solutions of quasilinear problems with nonlinear boundary condition*, **Nonlinear Anal. 43** (2001), pag. 623 – 636.

63. Zhang, Xinguang; Liu, Lishan The existence and nonexistence of entire positive solutions of semilinear elliptic systems with gradient term, **J. Math. Anal. Appl. 371** (2010), 300 – 308
Citeaza: M. Ghergu, C. Niculescu, V. Rădulescu, *Explosive solutions of elliptic equations with absorption and non-linear gradient term*, **Proc. Indian Acad. Sci. Math. Sci. 112** (2002), pag. 441 – 451.

64. Feng, Huabing; Zhong, Chengkui Boundary behavior of solutions for the degenerate logistic type elliptic problem with boundary blow-up, **Nonlinear Anal. 73** (2010), 3472 – 3478

Citeaza: F. Cirstea, V. Rădulescu, *Boundary blow-up in nonlinear elliptic equations of Bieberbach–Rademacher type*, **Trans. Amer. Math. Soc. 359** (2007), pag. 3275 – 3286.

65. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: F. Cirstea, V. Rădulescu, *Boundary blow-up in nonlinear elliptic equations of Bieberbach–Rademacher type*, **Trans. Amer. Math. Soc. 359** (2007), pag. 3275 – 3286.

66. Goncalves, J. V. A.; Zhou, Jiazheng Remarks on existence of large solutions for p-Laplacian equations with strongly nonlinear terms satisfying the Keller-Osserman condition, **Adv. Nonlinear Stud. 10** (2010), 757 – 769
Citeaza: F. Cirstea, V. Rădulescu, *Boundary blow-up in nonlinear elliptic equations of Bieberbach–Rademacher type*, **Trans. Amer. Math. Soc. 359** (2007), pag. 3275 – 3286.

67. Wang, Chengfu; Huang, Yisheng Multiple solutions for a class of quasilinear elliptic problems with discontinuous nonlinearities and weights, **Nonlinear Anal. 72** (2010), 4076 – 4081
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems with lack of compactness*, **Ann. Mat. Pura Appl. (4) 185** (2006), pag. 63 – 79.

68. Ma, Ruyun; Li, Jiemei Existence of positive solutions of a singular nonlinear boundary value problem, **Bound. Value Probl. 2010, Art. ID 458015** (2010), 16pp.
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

69. Zhang, Zhijun Boundary behavior of large solutions to semilinear elliptic equations with nonlinear gradient terms, **Nonlinear Anal. 73** (2010), 3348 – 3363
Citeaza: S. Dumont, L. Dupaigne, O. Goubet, V. Rădulescu, *Back to the Keller-Osserman condition for boundary blow-up solutions*, **Adv. Nonlinear Stud. 7** (2007), pag. 271 – 298.

70. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua; Fan, Zheng-en The exact blow-up rates of large solutions for semilinear elliptic equations, **Nonlinear Anal. 73** (2010), 3489 – 3501
Citeaza: S. Dumont, L. Dupaigne, O. Goubet, V. Rădulescu, *Back to the Keller-Osserman condition for boundary blow-up solutions*, **Adv. Nonlinear Stud. 7** (2007), pag. 271 – 298.

71. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Mihailescu, V. Rădulescu, *Spectrum in an unbounded interval for a class of nonhomogeneous differential operators*, **Bull. Lond. Math. Soc. 40** (2008), pag. 972 – 984.

72. Hamydy, Ahmed Existence and uniqueness of nonnegative solutions for a boundary blow-up problem, **J. Math. Anal. Appl. 371** (2010), 534 – 545
Citeaza: M. Ghergu, V. Rădulescu, *Nonradial blow-up solutions of sublinear elliptic equations with gradient term*, **Commun. Pure Appl. Anal. 3** (2004), pag. 465 – 474.

73. Adamowicz, Tomasz; Hästö, Peter Mappings of finite distortion and PDE with nonstandard growth, **Int. Math. Res. Not. IMRN 2010, no. 10** (2010), 1940 – 1965
Citeaza: R. Filippucci, P. Pucci, V. Rădulescu, *Existence and non-existence results for quasilinear elliptic exterior problems with nonlinear boundary conditions*, **Comm. Partial Differential Equations 33** (2008), pag. 706 – 717.

74. Caboussat, Alexandre; Glowinski, Roland; Leonard, Allison Looking for the best constant in a Sobolev inequality: a numerical approach, **Calcolo 47** (2010), 211– 238
Citeaza: M. Degiovanni, V. Rădulescu, *Perturbations of nonsmooth symmetric nonlinear eigenvalue problems*, **C. R. Acad. Sci. Paris Sr. I Math. 329** (1999), pag. 281 – 286.

75. D'Agui, Giuseppina; Molica Bisci, Giovanni Infinitely many solutions for perturbed hemivariational inequalities, **Bound. Value Probl. 2010, Art. ID 363518** (2010), 19 pp.
Citeaza: D. Motreanu, V. Rădulescu, *Existence results for inequality problems with lack of convexity*, **Numer. Funct. Anal. Optim. 21** (2000), pag. 869 – 884.

76. Stancu-Dumitru, Denisa Multiplicity of solutions for anisotropic quasilinear elliptic equations with variable exponents, **Bull. Belg. Math. Soc. Simon Stevin 17** (2010), 875 – 889
Citeaza: M. Mihailescu, V. Rădulescu, *Neumann problems associated to nonhomogeneous differential operators in Orlicz-Sobolev spaces*, **Ann. Inst. Fourier (Grenoble) 58** (2008), pag. 2087 – 2111.

77. D'Agui, Giuseppina; Molica Bisci, Giovanni Infinitely many solutions for perturbed hemivariational inequalities, **Bound. Value Probl. 2010, Art. ID 363518** (2010), 19 pp.
Citeaza: V. Rădulescu, *Qualitative analysis of nonlinear elliptic partial differential equations: monotonicity, analytic, and variational methods*, **Contemporary Mathematics and Its Applications, 6. Hindawi Publishing Corporation, New York** (2008).

78. Ji, Xiaohu; Bao, Jiguang Necessary and sufficient conditions on solvability for Hessian inequalities, **Proc. Amer. Math. Soc. 138** (2010), 175 – 188
Citeaza: M. Ghergu, V. Rădulescu, *Existence and nonexistence of entire solutions to the logistic differential equation*, **Abstr. Appl. Anal. 2003, no. 17** (2003), pag. 995 – 1003.

79. D'Agui, Giuseppina; Molica Bisci, Giovanni Infinitely many solutions for perturbed hemivariational inequalities, **Bound. Value Probl. 2010, Art. ID 363518** (2010), 19 pp.
Citeaza: N. Costea, V. Rădulescu, *Existence results for hemivariational inequalities involving relaxed $\eta - \alpha$ monotone mappings*, **Commun. Appl. Anal. 13** (2009), pag. 293 – 303.

80. Wang, Guanghui; Yang, Xiaozhong Finite difference approximation of a parabolic hemivariational inequalities arising from temperature control problem, **Int. J. Numer. Anal. Model. 7** (2010), pag. 108 – 124

Citeaza: F. Cirstea, V. Rădulescu, *Multiplicity of solutions for a class of nonsymmetric eigenvalue hemivariational inequalities*, **J. Global Optim. 17** (2000), pag. 43 – 54.

81. Fabbri, Isabella Regularity for a fourth-order critical equation with gradient nonlinearity, **J. Math. Anal. Appl. 369** (2010), pag. 179 – 187
Citeaza: P. Pucci, V. Rădulescu, *Remarks on a polyharmonic eigenvalue problem*, **C. R. Math. Acad. Sci. Paris 348** (2010), pag. 161 – 164.

Timofte Aida

1. Tomas Roubicek, Thermodinamics of rate-independent processes in viscous solids at small strains, **SIAM Journal On Mathematical Analysis 42** (2010), 256 – 297
Citeaza: Alexander Mielke, Aida Timofte, *Two-scale homogenization for evolutionary variational inequalities via the energetic formulation*, **SIAM Journal on Mathematical Analysis 39** (2007), pag. 642 – 668

Timotin Dan

1. Balasubramanian, Sriram, Non-commutative Carathodory interpolation, **Integral Equations Operator Theory 68** (2010), 529–550.
Citeaza: Ball, J. A.; Li, W. S.; Timotin, D.; Trent, T. T., *A commutant lifting theorem on the polydisc*, **Indiana Univ. Math. J. 48** (1999), pag. 653–675.

2. Cima, Joseph A.; Garcia, Stephan Ramon; Ross, William T.; Wogen, Warren R., Truncated Toeplitz operators: spatial isomorphism, unitary equivalence, and similarity, **Indiana Univ. Math. J. 59** (2010), 595–620.
Citeaza: Chevrot, Nicolas; Fricain, Emmanuel; Timotin, Dan, *The characteristic function of a complex symmetric contraction*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2877-2886.

3. Marcantognini, S. A. M.; Morán, M. D., A Schur type analysis of the minimal weak unitary Hilbert space dilations of a Kreĭn space bicontraction and the relaxed commutant lifting theorem in a Kreĭn space setting, **J. Funct. Anal. 259** (2010), pag. 2557-2586.
Citeaza: Li, W. S.; Timotin, D., *The relaxed intertwining lifting in the coupling approach*, **Integral Equations Operator Theory 54** (2006), pag. 97–111.

4. Baranov, Anton; Chalendar, Isabelle; Fricain, Emmanuel; Mashreghi, Javad; Timotin, Dan, Bounded symbols and reproducing kernel thesis for truncated Toeplitz operators, **J. Funct. Anal. 259** (2010), pag. 2673-2701.
Citeaza: Bakonyi, Mihály; Timotin, Dan, *On an extension problem for polynomials*, **Bull. London Math. Soc. 33** (2001), pag. 599–605.

Torok Andrei

1. • Title: Lorentz Gas with Thermostatted Walls Author(s): Chernov Nikolai; Dolgopyat Dmitry Source: ANNALES HENRI POINCARE Volume: 11 Issue: 6 Pages: 1117-1169 DOI: 10.1007/s00023-010-0047-2 Published: DEC 2010

CiteazăTitle: Statistical limit theorems for suspension flows Author(s): Melbourne I ; Torok A Source: ISRAEL JOURNAL OF MATHEMATICS Volume: 144 Pages: 191-209 DOI: 10.1007/BF02916712 Published: 2004

2. • Title: Network periodic solutions: full oscillation and rigid synchrony Author(s): Golubitsky Martin; Romano David; Wang Yunjiao Source: NONLINEARITY Volume: 23 Issue: 12 Pages: 3227-3243 DOI: 10.1088/0951-7715/23/12/012 Published: DEC 2010

   CiteazăTitle: Patterns of synchrony in coupled cell networks with multiple arrows Author(s): Golubitsky M ; Stewart I ; Torok A Source: SIAM JOURNAL ON APPLIED DYNAMICAL SYSTEMS Volume: 4 Issue: 1 Pages: 78-100 DOI: 10.1137/040612634 Published: 2005

3. • Title: Network periodic solutions: full oscillation and rigid synchrony Author(s): Golubitsky Martin; Romano David; Wang Yunjiao Source: NONLINEARITY Volume: 23 Issue: 12 Pages: 3227-3243 DOI: 10.1088/0951-7715/23/12/012 Published: DEC 2010

   CiteazăTitle: Network architecture and spatio-temporally symmetric dynamics Author(s): Josic Kresimir ; Torok Andrei Source: PHYSICA D-NONLINEAR PHENOMENA Volume: 224 Issue: 1-2 Pages: 52-68 DOI: 10.1016/j.physd.2006.09.024 Published: DEC 2006

Vilcu Costin

1. J. Rouyer, A Characterization of the Real Projective Plane, **Int. J. Math. 21** (2010), pag. 1605–1617
   Citeaza: C. Vîlcu, *On two conjectures of Steinhaus*, **Geom. Dedicata 79** (2000), pag. 267–275

2. J. Rouyer, A Characterization of the Real Projective Plane, **Int. J. Math. 21** (2010), pag. 1605–1617
   Citeaza: C. Vîlcu, T. Zamfirescu, *Multiple farthest points on Alexandrov surfaces*, **Adv. Geom. 7** (2007), 83–100

3. J. Itoh and K. Kiyohara, The Cut Loci on Ellipsoids and Certain Liouville Manifolds, **Asian J. Math. 14** (2010), 257–290
   Citeaza: J. Itoh and C. Vîlcu, *Farthest points and cut loci on some degenerate convex surfaces*, **J. Geom.** 80 (2004), 106–120

Zaharescu Alexandru

1. J. Marklof, A. Strombergsson, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, **Ann. of Math. (2) 172** (2010), 1949 – 2033.
   Citeaza: F. P. Boca, C. Cobeli, A. Zaharescu, *Distribution of lattice points visible from the origin*, **Comm. Math. Phys. 213** (2000), pag. 433 - 470.

2. J. Marklof, A. Strombergsson, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, **Ann. of Math. (2) 172** (2010), 1949 – 2033.
   Citeaza: F. P. Boca, R. N. Gologan, A. Zaharescu, *The statistics of the trajectory of a certain billiard in a flat two-torus*, **Comm. Math. Phys. 240** (2003), pag. 53 – 73.

3. J. Marklof, A. Strombergsson, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, **Ann. of Math. (2) 172** (2010), 1949 – 2033.
   Citeaza: F. P. Boca, A. Zaharescu, *The correlations of Farey fractions*, **J. London Math. Soc. 72** (2005), pag. 25 – 39.

4. J. Marklof, A. Strombergsson, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, **Ann. of Math. (2) 172** (2010), 1949 – 2033.
Citeaza: F. P. Boca, A. Zaharescu, *On the correlations of directions in the Euclidean plane*, **Trans. Amer. Math. Soc. 358** (2006), pag. 1797 -1825.

5. J. Marklof, A. Strombergsson, The distribution of free path lengths in the periodic Lorentz gas and related lattice point problems, **Ann. of Math. (2) 172** (2010), 1949 – 2033.
Citeaza: F. P. Boca, A. Zaharescu, *The distribution of the free path lengths in the periodic two-dimensional Lorentz gas in the small-scatterer limit*, **Comm. Math. Phys. 269** (2007), pag. 425 – 471.

6. J. Truelsen, Divisor problems and the pair correlation for the fractional parts of $n^2\alpha$, **Int. Math. Res. Not. IMRN** (2010), 3144 – 3183.
Citeaza: F. P. Boca, A. Zaharescu, *Pair correlation of values of rational functions (modp)*, **Duke Math. J. 105** (2000), pag. 267 – 3007.

7. J. Truelsen, Divisor problems and the pair correlation for the fractional parts of $n^2\alpha$, **Int. Math. Res. Not. IMRN** (2010), 3144 – 3183.
Citeaza: Z. Rudnick, P. Sarnak, A. Zaharescu, *The distribution of spacings between the fractional parts of* $n^2\alpha$, **Invent. Math. 145** (2001), pag. 37 – 57.

8. J. Truelsen, Divisor problems and the pair correlation for the fractional parts of $n^2\alpha$, **Int. Math. Res. Not. IMRN** (2010), 3144 – 3183.
Citeaza: A. Zaharescu, *Correlation of fractional parts of* $n^2\alpha$, **Forum Math. 15** (2003), pag. 1 – 21.

9. A. Bishnoi, S. K. Khanduja, On Eisenstein-Dumas and generalized Schonemann polynomials, **Comm. Algebra 38** (2010), 3163 - 3173.
Citeaza: V. Alexandru, N. Popescu, A. Zaharescu, *A theorem of characterization of residual transcendental extensions of a valuation*, **J. Math. Kyoto Univ. 28** (1988), pag. 579 – 592.

10. A. Bishnoi, S. K. Khanduja, On Eisenstein-Dumas and generalized Schonemann polynomials, **Comm. Algebra 38** (2010), 3163 - 3173.
Citeaza: N. Popescu, A. Zaharescu, *On the structure of the irreducible polynomials over local fields*, **J. Number Theory 52** (1995), pag. 98 – 118.

11. K. Ono, Parity of the partition function, **Adv. Math. 225** (2010), pag. 349 - 366.
Citeaza: B. C. Berndt, A. J. Yee, A. Zaharescu, *On the parity of partition functions*, **Internat. J. Math. 14** (2003), pag. 437 - 459.

12. K. Ono, Parity of the partition function, **Adv. Math. 225** (2010), pag. 349 - 366.
Citeaza: B. C. Berndt, A. J. Yee, A. Zaharescu, *New theorems on the parity of partition functions*, **J. Reine Angew. Math. 566** (2004), pag. 91 - 109.

Zamfirescu Tudor

1. J. F. Le Gall, *Geodesics in large planar maps and in the Brownian map*, **Acta Math. 205** pp. 46, 64 (2010). *Citează*: T. Zamfirescu, *Many endpoints and few interior points of geodesics*, **Invent. Math. 69** (1982) 253-257.

2. M. Abbas, P. Vetro, S. H. Khan, *On fixed points of Berinde's contractive mappings in cone metric spaces*, **Carpathian J. Math. 26**, (2010) pp. 122, 133. *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

3. Z. Q. Xue, G. W. Lv, B. E. Rhoades, *On Equivalence of Some Iterations Convergence for Quasi-Contraction Maps in Convex Metric Spaces*, **Fixed Point Theory Appl.**, Article Number: 252871 (2010). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

4. V. Berinde, *Approximating Common Fixed Points of Noncommuting Almost Contractions in Metric Spaces*, **Fixed Point Theory 11** (2010). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

5. V. Berinde, *Common Fixed Points of Noncommuting Discontinuous Weakly Contractive Mappings in Cone Metric Spaces*, **Taiwan. J. Math. 14** (2010). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

6. M. Abbas, D. Ilic, *Common Fixed Points of Generalized Almost Nonexpansive Mappings*, **Filomat 24** (2010). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

7. M. Moszynska, G. Sójka, *Concerning sets of the first Baire category with respect to different metrics*, **Bull. Polish Acad. Sci. Math. 58** (2010). *Citează*: T. Zamfirescu, *Description of most starshaped surfaces*, **Math. Proc. Cambridge Phil. Soc. 106** (1989) 245-251.

8. R. Espínola, C. Li, G. López, *Nearest and farthest points in spaces of curvature bounded below*, **J. Approx. Theory 162** (2010) pp. 1365, 1380. *Citează*: T. Zamfirescu, *Nearly all convex bodies are smooth and strictly convex*, **Monatsh. Math. 103** (1987) 57-62.

9. S. Nicoloso, U. Pietropaoli, *Coloring Toeplitz graphs*, **Electron. Notes Discrete Math. 36** (2010). *Citează*: R. van Dal, G. Tijssen, Zs. Tuza, J. van der Veen, Ch. Zamfirescu, T. Zamfirescu, *Hamiltonian properties of Toeplitz graphs*, **Discrete Math. 159** (1996) 69-81.

10. L. Yuan, *Acute Triangulations of Pentagons*, **Bull. Math. Soc. Sci. Math. Roum. 53** (101), 4 (2010). *Citează*: Th. Hangan, J. Itoh, T. Zamfirescu, *Acute triangulations*, **Bull. Math. Soc. Sc. Math. Roumanie 43**, 3-4 (2000) 279-286.

11. L. Yuan, *Acute Triangulations of Pentagons*, **Bull. Math. Soc. Sci. Math. Roum. 53** (101), 4 (2010). *Citează*: J. Itoh, T. Zamfirescu, *Acute triangulations of the regular icosahedral surface*, **Discrete Comput. Geom. 31** (2004) 197-206.

12. F. Chazal, D. Cohen-Steiner, Q. Mérigot, *Boundary Measures for Geometric Inference*, **Foundat. Comput. Math. 10** No. 2 (2010). *Citează*: T. Zamfirescu, *On the cut locus in Alexandrov spaces and applications to convex surfaces*, **Pacific J. Math. 217** (2004) 375-386.

13. H. Maehara, N. Tokushige, *Classification of the Congruent Embeddings of a Tetrahedron into a Triangular Prism*, **Graphs Comb. 27**, No. 3 (Proc. of the Japan Conference on Computational Geometry and Graphs (JCCGG2009)) (2011). *Citează*: J. Itoh, Y.

Tanoue, T. Zamfirescu, *Tetrahedra passing through a circular or square hole*, **Rend. Circ. Mat. Palermo Suppl. 77** (2006) 349-354.

14. L. Yuan, *Acute Triangulations of Pentagons*, **Bull. Math. Soc. Sci. Math. Roum. 53** (101), No. 4 (2010). *Citează*: J. Itoh, T. Zamfirescu, *Acute triangulations of the regular dodecahedral surface*, **Eur. J. Comb. 28** (2007) 1072-1086.

15. L. Yuan, *Acute triangulations of trapezoids*, **Discrete Appl. Math. 158** (2010). *Citează*: L. Yuan, T. Zamfirescu, *Acute triangulations of flat Möbius strips*, **Discrete Comput. Geom. 37** (2007) 671-676

16. V. Pambuccian, *Acute Triangulation of a Triangle in a General Setting*, **Canad. Math. Bull. 53**, 3 (2010) pp. 534, 541. *Citează*: L. Yuan, T. Zamfirescu, *Acute triangulations of flat Möbius strips*, **Discrete Comput. Geom. 37** (2007) 671-676

5.2 Citari aparute in alte publicatii

Ambro Florin

1. Druel, Stephane, Existence of minimal models for varieties of general type (after Birkar, Cascini, Hacon and McKernan), **Seminaire Bourbaki. Vol. 2007/2008. Asterisque No 326 (2009), Exp No 982** (2010)
   Citeaza: Ambro Florin, *Quasi-log varieties*, **Proc. Steklov Inst. Math. Vol 240 (1)** (2003), pag. 214 – 233

Badea Lori

1. M. Haiour and S. Boulaaras, Overlapping domain decomposition methods for elliptic quasi-variational inequalities related to impulse control problem, **An-Najah Univ. J. Research - Natural Science, 24**, 2010.
   Citeaza: L. Badea, On the Schwarz alternating method with more then two subdomains for nonlinear monotone problems, **SIAM J. Numer. Anal., 28**, 1, 1991, pag. 179-204.

2. H. Aochi and R. Ando, Numerical Simulation on Faulting: Microscopic evolution, macroscopic interaction and rupture process of earthquakes, **arXiv:1007.2104v1 [physics. geo-ph]**, 2010.
   Citeaza: L. Badea and P. Daripa, A domain embedding method using the optimal distributed control and a fast algorithm, **Numerical Algorithms, 36**, 2004, pag. 95-112.

3. A. Cesmelioglu, Complex Flow and Transport Phenomena in Porous Media, **PhD Thesis**, Rice University, 2010.
   Citeaza: L. Badea, M. Discacciati, and A. Quarteroni, Mathematical analysis of the Navier-Stokes/Darcy coupling, **tech. rep., Politecnico di Milano**, Milan, 2006.

Beltita Daniel

1. E. Andruchow, G. Corach, A. Maestripieri, *Geometry of unitary orbits of oblique projections*, **Acta Sci. Math. (Szeged) 76** (2010), 659–681.
   Citează: D. Beltiţă, *Smooth homogeneous structures in operator theory*, **Chapman & Hall/CRC Monographs and Surveys in Pure and Applied Mathematics, 137**, Chapman & Hall/CRC, Boca Raton, FL, 2006.

Chiose Ionut

1. M. Brunella, A characterization of Inoue surfaces, **arXiv:1011.2035**
   Citeaza: I. Chiose, M. Toma,
   On compact complex surfaces of Kähler rank one, **arXiv:1010.2591**

Cipu Mihai

1. M. H. Le, *Integral points on twin prime elliptic curve* E^+, J. Yunan Normal Univ., **30** (2010)
   Citează: M. Cipu, M. Bennett, M. Mignotte, R. Okazaki, *On the number of solutions of simultaneous Pell equations, II*, **Acta Arith., 122** (2006), 407–417

2. M. H. Le, *Integral points on twin prime elliptic curve* E^+, J. Yunan Normal Univ., **30** (2010)
   Citează: M. Cipu, M. Mignotte, *On the number of solutions to systems of Pell equations*, **J. Number Theory 125** (2007), 356–392

3. Filipin Alan; Fujita Yasutsugu, *The number of D(-1)-quadruples*, Math. Commun., **15** (2010), 387–391
   Citează: M. Bennett, M. Cipu, M. Mignotte, R. Okazaki, *On the number of solutions of simultaneous Pell equations, II*, **Acta Arith., 122** (2006), 407–417

Cobeli Cristian

1. Boca, Florin P., Distribution of the linear flow length in a honeycomb in the small-scatterer limit, **New York J. Math. 16,** (2010), pag. 651–735.
   Citeaza: Boca, Florin P.; Cobeli, Cristian; Zaharescu, Alexandru, *Distribution of lattice points visible from the origin*, **Comm. Math. Phys. 213, no. 2,** (2000), pag. 433–470.

David Liana

1. D. Burns, V. Guillemin, A. Uribe, The spectral density function of a toric variety, **Pure Appl. Math. Q no. 2 - Special issue in the honour of Michael Atiyah and Isadore Singer** (2010), pag. 361 – 382
   Citeaza: D. Calderbank, L. David, P. Gauduchon, *The Guillemin formula and Kahler metrics on toric symplectic manifolds*, **J. Symplectic Geom. vol. 1, no. 4** (2003), pag. 767 – 784.

Diaconescu Razvan

1. O. Kutz, T. Mossakowski, D. Lücke: *Carnap, Goguen, and the Hyperontologies Logical Pluralism and Heterogeneous Structuring in Ontology Design*, **Logica Universalis 4(2)** (2010), pag. 255–333
   Citează: R. Diaconescu: *Grothendieck institutions*, **Applied Categorical Structures 10(4)**, (2002) pag. 383–402.

2. O. Kutz, T. Mossakowski, D. Lücke: *Carnap, Goguen, and the Hyperontologies Logical Pluralism and Heterogeneous Structuring in Ontology Design*, **Logica Universalis 4(2)** (2010), pag. 255–333
   Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

3. O. Kutz, T. Mossakowski, D. Lücke: *Carnap, Goguen, and the Hyperontologies Logical Pluralism and Heterogeneous Structuring in Ontology Design*, **Logica Universalis 4(2)** (2010), pag. 255–333
Citează: R. Diaconescu, J. Goguen, P. Stefaneas: *Logical support for modularization*, în **Logical Environments**, editori G. Huet şi G. Plotkin, (1993) Cambridge Univ. Press, pag. 83–130.

4. O. Kutz, T. Mossakowski, D. Lücke: *Carnap, Goguen, and the Hyperontologies Logical Pluralism and Heterogeneous Structuring in Ontology Design*, **Logica Universalis 4(2)** (2010), pag. 255–333
Citează: T. Mossakowski, R. Diaconescu, A. Tarlecki: *What is a Logic Translation?*, **Logica Universalis 3(1)**, (2009), pag. 59–94.

5. J. Climent, J. Soliveres: *Institutions are not enough as shown by generalized terms*, **Studia Logica 95(3)** (2010), pag. 301–344
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

6. S. Autexier, D. Hutter, T. Mossakowski: *Change management for heterogeneous development graphs*, **Verification, induction termination analysis**, editori: S. Siegler, N. Wasser, Springer-Verlag (2010) pag. 54–80.
Citează: T. Mossakowski, R. Diaconescu, A. Tarlecki: *What is a Logic Translation?*, **Logica Universalis 3(1)**, (2009), pag. 59–94.

7. K. Futatsugi: *Fostering proof scores in CafeOBJ*, **Lecture Notes in Computer Science 6447** (2010) pag. 1–20.
Citează: R. Diaconescu, K. Futatsugi: **CafeOBJ report: The Language, Proof Techniques, and Methodologies for Object-Oriented Algebraic Specification**, World Scientific (1998).

8. K. Futatsugi: *Fostering proof scores in CafeOBJ*, **Lecture Notes in Computer Science 6447** (2010) pag. 1–20.
Citează: R. Diaconescu, K. Futatsugi: *Behavioural coherence in object-oriented algebraic specification*, **Universal Computer Science 6(1)**, (2000) pag. 74–96.

9. K. Futatsugi: *Fostering proof scores in CafeOBJ*, **Lecture Notes in Computer Science 6447** (2010) pag. 1–20.
Citează: R. Diaconescu, K. Futatsugi: *Logical foundations of CafeOBJ*, **Theoretical Computer Science 285(2)**, (2002) pag. 289-318.

10. K. Futatsugi: *Fostering proof scores in CafeOBJ*, **Lecture Notes in Computer Science 6447** (2010) pag. 1–20.
Citează: S.Iida, R. Diaconescu, K. Futatsugi, S. Iida: *Component-based algebraic specification and verification in CafeOBJ*, **Lecture Notes in Computer Science 1709** (1999), pag. 1644–1663.

11. K. Futatsugi: *Fostering proof scores in CafeOBJ*, **Lecture Notes in Computer Science 6447** (2010) pag. 1–20.
Citează: R. Diaconescu, J. Goguen: *An Oxford survey of order sorted algebra,* **Mathematical Structures in Computer Science 4(4)** (1994) pag. 363–392

12. K. Ogata, K. Futatsugi: *A combination of forward and backward reachability analysis methods*, **Lecture Notes in Computer Science 6447** (2010) pag. 501–517.
Citează: R. Diaconescu, K. Futatsugi: **CafeOBJ report: The Language, Proof Techniques, and Methodologies for Object-Oriented Algebraic Specification**, World Scientific (1998).

Dragan Vasile

1. Costa, O.L.V.; Benites, G.R.A.M, Linear minimum mean square filter for discrete-time linear systems with multiplicative noise, **Proceedings of the 49th IEEE Conference on Decision and Control (CDC), 978-1-4244-7745-6** (2010), pag. 7706 - 7711
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

2. Li Zhao-Yan; Zhou Bin; Wang Yong; Duan Guang-Ren, On eigenvalue sets and convergence rate of It stochastic systems with Markovian switching, **Proceedings of the 29th Chinese Control Conference (CCC), 978-1-4244-6263-6** (2010), 1144 - 1149
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

3. O.L.V. COSTA, G.R.A.M. BENITES, FILTRO DE MNIMOS QUADRADOS PARA SISTEMAS LINEARES DISCRETOS COM RUDOS MULTIPLICATIVOS, **XVIII Congresso Brasileiro de Automtica / 12 a 16-setembro-2010, Bonito-MS** (2010), 2933–2938
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

4. Yang Ying; Li Junmin; Chen Guopei, : Finite-time stability and stabilization of Markovian switching stochastic systems with impulsive effects, **Journal OF SYSTEMS ENGINEERING AND ELECTRONICS, Volume: 21 Issue: 2** (2010), 254–260
Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

5. Karimi Hamid Reza, Robust Regulation with an H(infinity) Constrain for Linear Two-Time Scale Systems, **IEEE INTERNATIONAL CONFERENCE ON CONTROL APPLICATIONS Book Series: IEEE International Conference on Control Applications**, (2010), 1975–1980
Citeaza Peng Shi; Dragan, V., *Asymptotic H_∞ control of singularly perturbed systems with parametric uncertainties*, **IEEE Trans. on Automatic Control, 44, 9** (1999), pag. 1738–1742

6. Kong Shulan; Zhang Huanshui, Optimal Parto control of stochastic system with multiplicative noises and Markovian jumping, **Proceedings of 29th Chinese Control Conference (CCC), 978-1-4244-6263-6** (2010), 1624–1629
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts**

and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC, (2006), carte.

7. Sathananthan, S.; Knap, M.J.; Keel, L.H., Robust stability and stabilization of a class of non-linear stochastic systems with state and controller dependent noise , **Proceedings of 49th IEEE Conference on Decision and Control (CDC), ISBN:978-1-4244-7745-6** (2010), 3355– 3360
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

8. A.M. Stoica, Mixed H2 and H? performance analysis of networked control systems with fading communication channels, **Advances in Control, Chemical Engineering, Civil Engineering and Mechanical Engineering, (WSEAS)**, 218–222,
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

9. Kulcsa?r, B.; Verhaegen, M., Robust cautious data driven control with guaranteed mean square stability, **Proceedings of 49th IEEE Conference on Decision and Control (CDC), ISBN:978-1-4244-7745-6** (2010), 2276– 2281
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

10. Yang Shu-Han; Chen Charn-Ying; Hsu Chao-Hsing; et al., e: A semi experiential electrical equivalent circuit for modeling the anode impedance of a direct methanol fuel cell using a rational function, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 6, 9** (2010), 4113–4124
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problem for a class of discrete-time stochastic linear systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 4, 9** (2008), pag. 2127–2137.

11. Jamshidi F.; Fakharian A.; Beheshti M. T. H., Fuzzy supervisor approach on logic-based switching H(2)/H(infinity), **PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, 224, I1** (2010), 11–19
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problem for a class of discrete-time stochastic linear systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 4, 9** (2008), pag. 2127–2137.

12. Yin Y. Y.; Liu F.; Shi P., Finite-time continuous gain-scheduled control on stochastic hyperchaotic systems, **PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL**

ENGINEERING, 224, I6 (2010), 679 –688
Citeaza: Dragan V ; Shi P ; Boukas EK, *Control of singularly perturbed systems with Markovian jump parameters: an H(infinity) approach*, **AUTOMATICA, 35, 8** (1999), pag. 1369–1378.

13. Ding Liping; Feng Yixiong; Mei Ping; et al., Robust control for fast -sampling discrete-time fuzzy singularly perturbed systems, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 6, 5** (2010), 2263 –2273
Citeaza: V. Dragan, *H_∞-norms and disturbance attenuation for systems with fast transients*, **IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 41, 5** (1996), pag. 747 –750.

14. Dongxiao Wu; Jun Wu; Sheng Chen, Robust control for discrete-time networked control systems, **Proceedings of the 8th World Congress on Intelligent Control and Automation, ISBN:978-1-4244-6712-9** (2010), 3532 –3537
Citeaza: Dragan V ; Halanay A ; Stoica A, *A small gain theorem for linear stochastic systems*, **SYSTEMS and CONTROL LETTERS, 30, 5** (1887), pag. 243– 251.

15. Ting Hou; Weihai Zhang; Hongji Ma, Conditions for essential instability and essential destabilization of linear stochastic systems, **Proceedings of the 8th World Congress on Intelligent Control and Automation, ISBN:978-1-4244-6712-9** (2010), 1770 –1775
Citeaza: Dragan Vasile; Morozan Toader; Stoica Adrian, *H^2 optimal control for linear stochastic systems*, **Automatica J. IFAC, 40** (2004), pag. 1103–1113.

16. LI Yue-Yang, ZHONG Mai-Ying, Fault Detection Filter for Linear Discrete Time-varying Systems with Multiple Packet Dropouts, **ACTA AUTOMATICA SINICA , vol 36, 12,** (2010), pag. 1788– 1796
Citeaza: Dragan Vasile; Morozan Toader, *Exponential stability for discrete time linear equations defined by positive operators.*, **Integral Equations Operator Theory, 54** (2006), pag. 465 – 493.

17. Costa, O.L.V.; Benites, G.R.A.M.;, Linear minimum mean square filter for discrete-time linear systems with multiplicative noise, **Proceedings to the 49th IEEE Conference on Decision and Control (CDC), December**, (2010), 7706 –7711
Citeaza: V. Dragan, T. Morozan, *Mean Square Exponential Stability for some Stochastic Linear Discrete Time Systems*, **European Journal of Control, 12, 4,** (2006), pag. 373 – 396.

18. O.L.V. COSTA, G.R.A.M. BENITES, FILTRO DE MNIMOS QUADRADOS PARA SISTEMAS LINEARES DISCRETOS COM RUDOS MULTIPLICATIVOS, **XVIII Congresso Brasileiro de Automtica / 12 a 16-setembro-2010, Bonito-MS** (2010), 2933–2938
Citeaza: V. Dragan, T. Morozan, *Mean Square Exponential Stability for some Stochastic Linear Discrete Time Systems*, **European Journal of Control, 12, 4,** (2006), pag. 373 – 396.

19. Zhang Weihai; Tian Peng; Hou Ting, Exact observability of stochastic time-varying systems, **Proceedings to 29th Chinese Control Conference (CCC), July**, (2010),

pag. 179 - 183
Citeaza: V. Dragan, T. Morozan, *Stochastic observability and applications,*, **IMA Journal of Mathematical Control and Information, 21,** (2004), pag. 323-344.

20. Fakharian, A.; Jamshidi, F.; Hamidi Beheshti1, M. Taghi; Logic based switching H2/H? controller design for linear singular perturbation systems: A fuzzy supervisor approach, **Proceedings to the 8th IEEE International Conference on Control and Automation (ICCA),** (2010), 1311- 1315
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problem for a class of discrete-time stochastic linear systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 4, 9** (2008), pag. 2127–2137.

21. T. O. Olwal, K. Djouani, B. J. van Wyk, Y. Hamam, P. Siarry, A Multi-Radio Multi-Channel Unification Power Control for Wireless Mesh Networks **International Journal of Electrical and Computer Engineering, 5, 1**, (2010), 38-50
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problem for a class of discrete-time stochastic linear systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 4, 9** (2008), pag. 2127–2137.

22. Bayat, F.; Jalali, A.A., Constant reference tracking for fast linear constrained systems, **IEEE International Symposium on Intelligent Control (ISIC)**, (2010), 2308–2313
Citeaza: V. Dragan, T. Morozan, *Discrete-time Riccati type equations and the tracking problem,*, **ICIC Express Letters, 2, 2,** (2008), pag. 109 – 116

23. Costa, O.L.V.; Benites, G.R.A.M., Linear minimum mean square filter for discrete-time linear systems with multiplicative noise, **Proceedings of the 49th IEEE Conference on Decision and Control (CDC), Dec.** (2010), 7706– 7711
Citeaza: V. Dragan, T. Morozan, *Observability and detectability of a class of discrete-time stochastic linear systems*, **IMA Journal of Mathematical Control and Information, 23** (2006), pag. 371–394.

24. Zhang Weihai; Tian Peng; Hou Ting, Exact observability of stochastic time-varying systems,**Proceedings of the 29th Chinese Control Conference (CCC), July,** (2010), 179-183
Citeaza: V. Dragan, T. Morozan, *Observability and detectability of a class of discrete-time stochastic linear systems*, **IMA Journal of Mathematical Control and Information, 23** (2006), pag. 371- -394.

25. Costa, O.L.V.; Benites, G.R.A.M., Linear minimum mean square filter for discrete-time linear systems with multiplicative noise, **Proceedings of the 49th IEEE Conference on Decision and Control (CDC),** (2010), pag. 7706 - 7711
Citeaza: A. M. Stoica, V. Dragan, I. Yaesh, *Kalman-type filtering for stochastic systems with state-dependent noise and Markovian jumps*, **Proceedings of the 15th IFAC symposium on system identification, Saint-Maio, France**, (2009), pag. 13751380.

Faciu Cristian

1. S. Mohanraj, Discrete modeling of shape memory alloys, Ph.D Thesis, National University of Singapore, 2009 (http://scholarbank.nus.edu.sg) *Citeaza*: C. Făciu, M. Mihăilescu-Suliciu, *On modelling phase propagation in SMAs by a Maxwellian thermo-viscoelastic approach*, **International Journal of Solids Structures** (2002), pag. 3811–3830.

Polisevschi Dan

1. Kenneth Okonkwo, 3D permeability characterization of fibrous media, **Mechanical Engineering Thesis, University of Delaware** (2010) 107 pages
Citeaza: H.I. Ene, D. Polišević, *Thermal Flow in Porous Media*, **D.Reidel Pub.Co., Dordrecht, Holland** (1987) 208 pages

Popa A. Alexandru

1. Harcos, G., Equidistribution on the modular surface and L-functions, **Clay Math. Inst. Proc. 10** (2010), ISBN: 978-0-8218-4742-8, p. 377-387
Citeaza: A. A. Popa, *Central values of Rankin L-series over real quadratic fields,* **Compos. Math. 142** (2006), 811866.

Radulescu Vicentiu

1. Fernández Bonder, Julián; Silva, Analia Concentration-compactness principle for variable exponent spaces and applications, **Electron. J. Differential Equations 2010, No. 141** (2010), 18 pp.
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

2. Ghanmi, Abdeljabbar Existence of positive solutions for some nonlinear parabolic equations in the half space, **Electron. J. Differential Equations 2010, No. 143** (2010), 8 pp.
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

3. Ghanmi, Abdeljabbar Existence of positive solutions for some nonlinear parabolic equations in the half space, **Electron. J. Differential Equations 2010, No. 143** (2010), 8 pp.
Citeaza: M. Ghergu, V. Rădulescu, *Sublinear singular elliptic problems with two parameters*, **J. Differential Equations 195** (2003), pag. 520 – 536.

4. Lair, Alan V. Nonradial entire large solutions of semilinear elliptic equations, **J. Partial Differ. Equ. 23** (2010), 366 – 373
Citeaza: F. Cirstea, V. Rădulescu, *Blow-up boundary solutions of semilinear elliptic problems*, **Nonlinear Anal. 48** (2002), pag. 521 – 534.

5. Bocea, Marian; Mihailescu, Mihai; Popovici, Cristina On the asymptotic behavior of variable exponent power-law functionals and applications, **Ric. Mat. 59** (2010), 207 – 238
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Nonhomogeneous boundary value problems in anisotropic Sobolev spaces*, **C. R. Math. Acad. Sci. Paris 345** (2007), pag. 561 – 566.

6. Ghanmi, Abdeljabbar Existence of positive solutions for some nonlinear parabolic equations in the half space, **Electron. J. Differential Equations 2010, No. 143** (2010), 8 pp.
Citeaza: M. Ghergu, V. Rădulescu, *Multi-parameter bifurcation and asymptotics for the singular Lane-Emden-Fowler equation with a convection term*, **Proc. Roy. Soc. Edinburgh Sect. A 135** (2005), pag. 61 – 83.

7. Wu, Mingzhu; Yang, Zuodong Existence of positive and sign-changing solutions for p-Laplace equations with potentials in $\mathbb{R}^N$, **Electron. J. Differential Equations 2010, No. 05** (2010), 16 pp.
Citeaza: V. Rădulescu, D. Smets, *Critical singular problems on infinite cones*, **Nonlinear Anal. 54** (2003), pag. 1153 – 1164.

8. Gontara, Sabrine; El Abidine, Zagharide Zine Existence of positive bounded solutions for some nonlinear polyharmonic elliptic systems, **Electron. J. Differential Equations 2010, No. 113** (2010), 18 pp.
Citeaza: F. Cirstea, V. Rădulescu, *Entire solutions blowing up at infinity for semilinear elliptic systems*, **J. Math. Pures Appl. (9) 81** (2002), pag. 827 – 846.

9. Agarwal, Ravi P.; Ghaemi, M. B.; Saiedinezhad, S. The Nehari manifold for the degenerate p-Laplacian quasilinear elliptic equations, **Adv. Math. Sci. Appl. 20** (2010), 37 – 50
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems with lack of compactness*, **Ann. Mat. Pura Appl. (4) 185** (2006), pag. 63 – 79.

10. Ghanmi, Abdeljabbar Existence of positive solutions for some nonlinear parabolic equations in the half space, **Electron. J. Differential Equations 2010, No. 143** (2010), 8 pp.
Citeaza: L. Dupaigne, M. Ghergu, V. Rădulescu, *Lane-Emden-Fowler equations with convection and singular potential*, **J. Math. Pures Appl. (9) 87** (2007), pag. 563 – 581.

11. Ghanmi, Abdeljabbar Existence of positive solutions for some nonlinear parabolic equations in the half space, **Electron. J. Differential Equations 2010, No. 143** (2010), 8 pp.
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

12. Papageorgiou, Nikolaos S.; Rocha, Eugnio M.; Staicu, Vasile On the existence of three nontrivial smooth solutions for nonlinear elliptic equations, **J. Nonlinear Convex Anal. 11** (2010), pag. 115 – 136
Citeaza: S. Dabuleanu, V. Rădulescu, *Multi-valued boundary value problems involving Leray-Lions operators and discontinuous nonlinearities*, **Rend. Circ. Mat. Palermo (2) 52** (2003), pag. 57 – 69.

Timotin Dan

1. Beanland, Kevin; Dodos, Pandelis, On strictly singular operators between separable Banach spaces, **Mathematika 56** (2010), pag. 285-304.
   Citeaza: Chalendar, Isabelle; Fricain, Emmanuel; Popov, Alexey I.; Timotin, Dan; Troitsky, Vladimir G., *Finitely strictly singular operators between James spaces*, **J. Funct. Anal. 256** (2009), pag. 1258–1268.

Zamfirescu Tudor

1. M. O. Olatinwo, *Some stability results for Picard and Mann iteration processes using contractive condition of integral type*, **Creative Math. & Inf. 19** (2010) pp. 58, 64.
   Citează: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

5.3 Citari aparute in carti

Cipu Mihai

1. R. K. Guy, *Unsolved problems in Number Theory*, 3rd ed., Springer, 2004, pag. 246, ISBN: 0-387-20860-7
   Citează: M. Cipu, *A bound for the solutions of the Diophantine equation* $D_1x^2+D_2^m = 4y^n$, **Proc. Japan Acad. 78**, Ser. A(2002), 179–180

2. R. K. Guy, *Unsolved problems in Number Theory*, 3rd ed., Springer, 2004, pag. 298, ISBN: 0-387-20860-7
   Citează: M. Cipu, *Diophantine equations with at most one positive solution*, **Man. Math. 93** (1997), 349–356

Ene Horia - Lucrarea: H. I. Ene and E. Sanchez-Palencia, Equations et phenomenes de surface pour l'ecoulement dans un modele de milieu poreux, Journal de Mecanique, vol. 4 (1975) pp.73-108 a fost citata in cartile: 1. L. Tartar - The general theory of homogenization: a personalized introduction, Springer Verlag, Lecture Notes of the Unione Matematica Italiana 7, 2010; 2. C. C. Mei, B. Vernescu - Homogenization Methods for Multiscale Mechanics, World Scientific, 2010

Popescu Ionel

1. G. Blower, *Random matrices: high dimensional phenomena*, London Mathematical Society Lecture Note Series, 367. Cambridge University Press, Cambridge, 2009. x+437:
   Mass transportation proofs of free functional inequalities, and free Poincaré inequalities, **Journal of Functional Analysis** 257, (2009) 1175-1221

Timotin Dan

1. Sz.-Nagy, Béla; Foias, Ciprian; Bercovici, Hari; Kérchy, László, *Harmonic analysis of operators on Hilbert space. Second edition. Revised and enlarged edition*, Springer, New York (2010), pag. xiv+474, ISBN:978-1-4419-6093-1.
   Citeaza: Ball, J. A.; Li, W. S.; Timotin, D.; Trent, T. T., *A commutant lifting theorem on the polydisc*, **Indiana Univ. Math. J. 48** (1999), pag. 653–675.

6 Citari aparute in 2011

6.1 Citari aparute in reviste cotate ISI

Albu Toma

1. E.R. Puczylowski, *A linear property of Goldie dimension of modules and modular lattices*, **J. Pure Appl. Algebra** (2011), pag. 1596 – 1605.
   Citeaza: T. Albu, M.Iosif, M.L. Teply, *Modular QFD lattices with applications to Grothendieck categories and torsion theories*, **J. Algebra Appl. 3** (2004), 391-410.
   Citeaza: T. Albu, P.F. Smith *Localization of modular lattices, Krull dimension, and the Hopkins–Levitzki Theorem (II)*, **Comm. Algebra 25** (1997), 1111-1128.

Ambro Florin

1. Shokurov Vyacheslav V.; Choi Sung Rak, Geography of log models: theory and applications, **Central European Journal of Mathematics Vol 9 (3)** (2011), 489 – 534
   Citeaza: Ambro Florin, *The moduli b-divisor of an lc-trivial fibration*, **Compositio Mathematica Vol 141 (2)** (2005), pag. 385 – 403

2. Fujino, Osamu, Non-vanishing theorem for log canonical pairs, **J. Algebr. Geom. Vol 20 (4)** (2011), 771 – 783
   Citeaza: Ambro Florin, *Quasi-log varieties*, **Proc. Steklov Inst. Math. Vol 240 (1)** (2003), pag. 214 – 233

3. Kawakita Masayuki, Towards boundedness of minimal log discrepancis by the Riemann-Roch Theorem, **American Journal of Mathematics Vol 133 (5)** (2011), 1299 – 1311
   Citeaza: Ambro Florin, *On minimal log discrepancies*, **Mathematical Research Letters Vol 6 (5-6)** (1999), pag. 573 – 580

4. de Fernex Tommaso; Hacon Christopher D., Deformations of canonical pairs and Fano varieties, **Journal Fur Die Reine Und Angewandte Mathematik Vol 651** (2011), 97 – 126
   Citeaza: Ambro Florin, *On minimal log discrepancies*, **Mathematical Research Letters Vol 6 (5-6)** (1999), pag. 573 – 580

5. Fukuma, Yoshiaki, Effective non-vanishing of global sections of multiple adjoint bundles for polarized 3-fold , **J. Pure Appl. Algebra Vol 215 (2)** (2011), 168 – 184
   Citeaza: Ambro Florin, *Ladders on Fano varieties*, **J. Math. Sci. (New York) Vol 94 (1)** (1999), pag. 1126 – 1135

Anghel Cristian

1. MICHELE BOLOGNESI and SONIA BRIVIO, COHERENT SYSTEMS AND MODULAR SUBAVRIETIES OF $\mathcal{SU}_C(r)$, **International Journal of Mathematics - just accepted** DOI No: 10.1142/S0129167X12500371
   Citeaza: Christian Anghel, *Fibres vectoriels semi-stables sur une courbe de genre deux et association des points dans l'espace projectif*, **Serdica Math. J 30 2-3** (2004), pag. 103-110

Aprodu Marian

1. Pietro De Poi, Francesco Zucconi, Gonality, apolarity and hypercubics, **Bull. London Math. Soc. 43** (2011), pag. 849 – 858
   Citeaza: Marian Aprodu, Claire Voisin, *Green-Lazarsfeld's conjecture for generic curves of large gonality*, **C. R. Math. Acad. Sci. Paris 336-4** (2003), pag. 335 – 339

2. Andreas Höring, Thomas Peternell, Non-algebraic compact Khler threefolds admitting endomorphisms, **SCIENCE CHINA Mathematics Volume 54, Number 8** (2011), pag.1635 – 1664
   Citeaza: Marian Aprodu, Stefan Kebekus, Thomas Peternell, *Galois coverings and endomorphisms of projective varieties*, **Math Z. 260** (2008), pag. 431 – 449

3. Liviu Ornea, Radu Pantilie, On holomorphic maps and Generalized Complex Geometry, **Journal of Geometry and Physics 61-8** (2011), pag. 1502 – 1515
   Citeaza: Monica Alice Aprodu, Marian Aprodu, Vasile Brinzanescu, *A class of harmonic submersions and minimal submanifolds*, **International J. Math. 11-9** (2000), pag.1177 – 1191

4. Gavril Farkas, Angela Ortega, The maximal rank conjecture and rank two Brill-Noether theory, **Pure and Applied Math. Quarterly 7** (2011), 1265 – 1296.
   Citeaza: Marian Aprodu, Jan Nagel, *Non-vanishing for Koszul cohomology of curves*, **Comment. Math. Helvetici 82** (2007), pag. 617 – 628

5. Gavril Farkas, Angela Ortega, The maximal rank conjecture and rank two Brill-Noether theory, **Pure and Applied Math. Quarterly 7** (2011), 1265 – 1296.
   Citeaza: Marian Aprodu, Gavril Farkas, *Koszul cohomology and applications to moduli*, **Grassmannians, Moduli Spaces and Vector Bundles**, editori: David A. Ellwood, Clay Mathematics Institute, Cambridge, MA, Emma Previato, Boston University, MA, AMS, Clay Mathematics Proccedings vol. 14 (2011), pag. 25 – 50, ISBN-10: 0-8218-5205-1, ISBN-13: 978-0-8218-5205-7

6. Yusuf Mustopa, Kernel Bundles, Syzygies of Points, and the Effective Cone of C_{g-2}, **Int. Math. Res. Notices (6)** (2011), 1417 – 1437
   Citeaza: Marian Aprodu, Gavril Farkas, *Koszul cohomology and applications to moduli*, **Grassmannians, Moduli Spaces and Vector Bundles**, editori: David A. Ellwood, Clay Mathematics Institute, Cambridge, MA, Emma Previato, Boston University, MA, AMS, Clay Mathematics Proccedings vol. 14 (2011), pag. 25 – 50, ISBN-10: 0-8218-5205-1, ISBN-13: 978-0-8218-5205-7

7. Filip Cools, Jan Draisma, Sam Payne, Elina Robeva, A tropical proof of the Brill-Noether Theorem, **Advances in Math.** (2011), în curs de apariţie
   Citeaza: Marian Aprodu, Gavril Farkas, *Koszul cohomology and applications to moduli*, **Grassmannians, Moduli Spaces and Vector Bundles**, editori: David A. Ellwood, Clay Mathematics Institute, Cambridge, MA, Emma Previato, Boston University, MA, AMS, Clay Mathematics Proccedings vol. 14 (2011), pag. 25 – 50, ISBN-10: 0-8218-5205-1, ISBN-13: 978-0-8218-5205-7

8. Ivona Grzegorczyk, Vincent Mercat, Peter E. Newstead, Stable bundles of rank 2 with 4 sections, **Int. J. Math.** (2011), în curs de apariţie

Citeaza: Marian Aprodu, Jan Nagel, *Non-vanishing for Koszul cohomology of curves*, **Comment. Math. Helvetici 82** (2007), pag. 617 – 628

9. Ivona Grzegorczyk, Vincent Mercat, Peter E. Newstead, Stable bundles of rank 2 with 4 sections, **Int. J. Math.** (2011), în curs de apariţie
Citeaza: Marian Aprodu, Jan Nagel, *Koszul Cohomology and Algebraic Geometry*, **University Lecture Series AMS, 52** (2010)

10. Nero Budur, Pedro G. Gonzalez-Perez, Manuel Gonzalez Villa, Log canonical thresholds of quasi-ordinary hypersurface singularities, **arXiv:1105.2794** (2011), va apare în **Proc. A.M.S.**
Citeaza: Marian Aprodu, Daniel Naie, *Enriques diagrams and log-canonical thresholds of curves on smooth surfaces*, **Geometriae Dedic. 146** (2010), pag. 43 – 66

11. Gavril Farkas, Alessandro Verra, Moduli of theta-characteristics via Nikulin surfaces, **arXiv:1105.2794** (2011), va apare în **Math. Ann.**
Citeaza: Marian Aprodu, Gavril Farkas, *Green's Conjecture for general covers*, acceptata la Contemporary Math. AMS

Badea Lori

1. M.-B. Tran, A parallel four step domain decomposition scheme for coupled forwardbackward stochastic differential equations, **J. Math. Pures Appl., 96**, 2011, pag. 377-394.
Citeaza: L. Badea, On the Schwarz alternating method with more then two subdomains for nonlinear monotone problems, **SIAM J. Numer. Anal., 28**, 1, 1991, pag. 179-204.

2. M. Chau, R. Couturier, J. Bahi, and P. Spiter, Parallel solution of the obstacle problem, **International Journal of High Performance Computing Applications**, 2011, doi:10.1177/1094342010395412.
Citeaza: L. Badea and J. Wang, An Additive Schwarz method for variational inequalities, **Math. of Comp., 69**, 232, 2000, pag. 1341-1354.

3. J.P. Agnelli, A.A. Barrea and C.V. Turner, Tumor location and parameter estimation by thermography, **Mathematical and Computer Modelling, 53**, 7-8, 2011, pag. 1527-1534.
Citeaza: L. Badea and P. Daripa, On a Fourier method of embedding domains using an optimal distributed control, **Numerical Algorithms, 32**, 2003, pag. 261-273.

4. P. Daripa, A brief review of some application driven fast algorithms for elliptic partial differential equations, **Central European Journal of Mathematics**,
DOI: 10.2478/s11533-011-0103-2, 2011.
Citeaza: L. Badea and P. Daripa, On a Fourier method of embedding domains using an optimal distributed control, **Numerical Algorithms, 32**, 2003, pag. 261-273.

5. L. Du and X. Wu, On a rational differential quadrature method in irregular domains for problems with boundary layers, **Applied Mathematics and Computation, 218**, 4, 15, 2011, pag. 1379-1388.
Citeaza: L. Badea and P. Daripa, On a Fourier method of embedding domains using an optimal distributed control, **Numerical Algorithms, 32**, 2003, pag. 261-273.

6. P. Daripa, A brief review of some application driven fast algorithms for elliptic partial differential equations, **Central European Journal of Mathematics**,
DOI: 10.2478/s11533-011-0103-2, 2011.
Citeaza: L. Badea and P. Daripa, A fast algorithm for two-dimensional elliptic problems, **Numer. Algorithms, 30**, 3-4, 2002, pag.199–239.

7. L. Du and X. Wu, On a rational differential quadrature method in irregular domains for problems with boundary layers, **Applied Mathematics and Computation, 218**, 4, 15, 2011, pag. 1379-1388.
Citeaza: L. Badea and P. Daripa, A fast algorithm for two-dimensional elliptic problems, **Numer. Algorithms, 30**, 3-4, 2002, pag.199–239.

8. I. Doghri, L. Brassart, L. Adam and J.-S. Gérard, A second-moment incremental formulation for the mean-field homogenization of elasto-plastic composites, **International Journal of Plasticity, 27**, 3, 2011, pag. 352-371.
Citeaza: R. Brenner, O. Castelnau and L. Badea, Mechanical field fluctuations in polycrystals estimated by homogenization techniques, **Proc. R. Soc. Lond. A, 460**, 2004, pag. 3589-3612.

9. E. Le Bourhis, D Faurie, P. O Renault, G. Geandier, D. Thiaudiere, O. Castelnau and Ph. Goudeau, X-ray elastic response of metallic thin film supported by polyimide substrates, **Journal of Strain Analysis for Engineering Design, 47**, 7, 2011, pag. 639-649.
Citeaza: R. Brenner, O. Castelnau and L. Badea, Mechanical field fluctuations in polycrystals estimated by homogenization techniques, **Proc. R. Soc. Lond. A, 460**, 2004, pag. 3589-3612.

10. P. Daripa, A brief review of some application driven fast algorithms for elliptic partial differential equations, **Central European Journal of Mathematics**,
DOI: 10.2478/s11533-011-0103-2, 2011.
Citeaza: L. Badea and P. Daripa, A domain embedding method using the optimal distributed control and a fast algorithm, **Numerical Algorithms, 36**, 2004, pag. 95-112.

11. L. Du and X. Wu, On a rational differential quadrature method in irregular domains for problems with boundary layers, **Applied Mathematics and Computation, 218**, 4, 15, 2011, pag. 1379-1388.
Citeaza: L. Badea and P. Daripa, A domain embedding method using the optimal distributed control and a fast algorithm, **Numerical Algorithms, 36**, 2004, pag. 95-112.

12. D. Volkov, A numerical boundary eigenvalue problem for elastic cracks in free and half space, **J. Comp. Math., 29**, 2011, pp. 543-573.
Citeaza: L. Badea, I. R. Ionescu and S. Wolf, Schwarz method for earthquake source dynamics, **Journal of Computational Physics, 8**, 2008, pag. 3824-3848.

13. Y. Cao, M. Gunzburger, X. He and X. Wang, Robin-Robin domain decomposition methods for the steady-state StokesDarcy system with the BeaversJoseph interface condition, **Numer. Math., 117**, 4, 2011, pag. 601-629.
Citeaza: L. Badea, M. Discacciati and A. Quarteroni, Mathematical analysis of the Navier-Stokes/Darcy coupling, **Numer. Math., 115**, 2, pag. 195227, 2010.

14. P. Chidyagwai and B. Rivière, A two-grid method for coupled free flow with porous media flow, **Advances in Water Resources, 34**, 9, 2011, pag. 1113-1123.
Citeaza: L. Badea, M. Discacciati and A. Quarteroni, Mathematical analysis of the Navier-Stokes/Darcy coupling, **Numer. Math., 115**, 2, pag. 195227, 2010.

Barcau Alexandru Mugurel

1. Ahlgren, S.; Rouse, J., Congruences for newforms and the index of the Hecke algebra, **Proceedings of the American Mathematical Society 139, no. 4** (2011), 1247-1261.
Citeaza: Ahlgren, S.; Barcau, M., *Congruences for modular forms of weights two and four*, **Journal of Number Theory 126, no. 2** (2007), pag. 193-199.

2. Barcau, M.; Pasol, V., mod p congruences for cusp forms of weight four for $\Gamma_0(pN)$, **International Journal of Number Theory 7, no. 2** (2011), 341 – 350.
Citeaza: Ahlgren, S.; Barcau, M., *Congruences for modular forms of weights two and four*, **Journal of Number Theory 126, no. 2** (2007), pag. 193-199.

Baditoiu Gabriel

1. S. Ianuş, A.M. Ionescu, R. Mocanu and G.E. Vîlcu, Riemannian submersions from almost contact metric manifolds, **Abh. Math. Semin. Univ. Hambg. 81** (2011), pag. 101 - 114
Citeaza: G. Bădiţoiu and S. Ianuş, *Semi-Riemannian submersions from real and complex pseudo-hyperbolic spaces*, **Differential Geometry and its Applications 16** (2002), pag. 79 - 94

Belinschi T. Serban

1. Michael Anshelevich, Bochner-Pearson-type characterization of the free Meixner class, **Advances in Applied Mathematics, Vol. 46, No. 1–4** (2011), pag. 25–45
Citeaza: Serban T. Belinschi, Alexandru Nica, *On a remarkable semigroup of homomorphisms with respect to free multiplicative convolution*, **Indiana University Mathematics Journal Vol. 57, No 4** (2008), pag. 1679–1713.

2. Michael Anshelevich, Two-state free Brownian motions, **Journal of Functional Analysis, Vol. 260, No. 2** (2011), pag. 541–565
Citeaza: Serban T. Belinschi, Alexandru Nica, *On a remarkable semigroup of homomorphisms with respect to free multiplicative convolution*, **Indiana University Mathematics Journal Vol. 57, No 4** (2008), pag. 1679–1713.

3. Michael Anshelevich, Two-state free Brownian motions, **Journal of Functional Analysis, Vol. 260, No. 2** (2011), pag. 541–565
Citeaza: Serban T. Belinschi, *C-free convolution for measures with unbounded support*, **Von Neumann algebras in Sibiu, Theta Ser. Adv. Math., 10, Theta, Bucharest,** (2008), pag. 1–7.

4. Teodor Banica, Adam Skalski, Two-parameter families of quantum symmetry groups, **Journal of Functional Analysis, Vol. 260, No. 11** (2011), pag. 3252–3282
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

5. Dang-Zheng Liu, Chunwei Song, Zheng-Dong Wang, On explicit probability densities associated with Fuss-Catalan numbers, **Proceedings of the American Mathematical Society, Vol. 139, No. 10** (2011), pag. 3735–3738
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

6. Andrzej Jarosz, Summing free unitary random matrices, **Physical review. E, Vol. 84, No. 1** (2011), Article Number: 011146
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

7. Karol Zyczkowski, Karol A. Penson, Ion Nechita, Benoît Collins, Generating random density matrices, **Journal of Mathematica Physics, Vol. 52, No. 6** (2011), Article Number: 062201
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

8. Wojciech Roga, Marek Smaczynski, Karol Zyczkowski, Composition of quantum operations and products of random matrices, **ACTA PHYSICA POLONICA B Vol. 42, Issue 5** (2011), 1123–1140
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

9. Melanie Hinz, Wojciech Młotkowski, Free powers of the free Poisson measure, **Colloquium Mathematicum, Vol. 123, Issue 2** (2011), pag. 285–290
Citeaza: T. Banica, S. Belinschi, M. Capitaine and B. Collins, *Free Bessel laws*, **Canadian Journal of Mathematics, Vol. 63** (2011), pag. 3–37.

10. Paweł J. Szabłowski, Expansions of one density via polynomials orthogonal with respect to the other, **Journal of Mathematical Analysis and Applications, Vol. 383** (2011), pag. 35–54
Citeaza: M. Anshelevich, S.T. Belinschi, M. Bożejko, F. Lehner, *Free infinite divisibility for q-Gaussians*, **Mathematical Research Letters, Vol. 17, No. 5** (2010), pag. 905–916

11. Charles Bordenave, Pietro Caputo, Djalil Chafai, Spectrum of large random reversible Markov chains: heavy-tailed weights on the complete graph, **Annals of probability, Vol. 39, Issue 4** (2011), pag. 1544–1590
Citeaza: Serban Belinschi, Amir Dembo, Alice Guionnet, *Spectral Measure of Heavy Tailed Band and Covariance Random Matrices,* **Communications in Mathematical Physics, Vol. 289, No. 3** (2009), pag. 1023–1055.

12. Arup Bose, Suman Guha, Rajat Subhra Hazra, Koushik Saha, Circulant type matrices with heavy tailed entries, **Statistics & Probability Letters, Vol. 81, Issue 11** (2011), pag. 1706–1716
Citeaza: Serban Belinschi, Amir Dembo, Alice Guionnet, *Spectral Measure of Heavy Tailed Band and Covariance Random Matrices,* **Communications in Mathematical Physics, Vol. 289, No. 3** (2009), pag. 1023–1055.

13. Gennadii P. Chistyakov, Friedrich Götze, The arithmetic of distributions in free probability theory, **Central European Journal of Mathematics, Vol. 9, No. 5** (2011), pag. 997–1050
Citeaza: S. T. Belinschi, H. Bercovici, *Hinčin's theorem for multiplicative free convolution,* **Canadian Mathematical Bulletin, Vol. 51, No. 1** (2008), pag. 26–31.

14. Gennadii P. Chistyakov, Friedrich Götze, The arithmetic of distributions in free probability theory, **Central European Journal of Mathematics, Vol. 9, No. 5** (2011), pag. 997–1050
Citeaza: Serban T. Belinschi, Hari Bercovici, *A new approach to subordination results in free probability*, **Journal d'Analyse Mathématique Vol. 101** (2007), pag. 357–365.

15. Gennadii P. Chistyakov, Friedrich Götze, Franz Lehner, Freeness of linear and quadratic forms in von Neumann algebras, **Journal of Functional Analysis, Vol. 261, Issue 10**, (2011), pag. 2829–2844,
Citeaza: Serban T. Belinschi, Hari Bercovici, *A new approach to subordination results in free probability*, **Journal d'Analyse Mathématique Vol. 101** (2007), pag. 357–365.

16. Gennadii P. Chistyakov, Friedrich Götze, The arithmetic of distributions in free probability theory, **Central European Journal of Mathematics, Vol. 9, No. 5** (2011), pag. 997–1050
Citeaza: Serban T. Belinschi, Hari Bercovici, *Partially defined semigroups relative to multiplicative free convolution*, **International mathematics research notices, Issue 2**, (2005), pag. 65–101.

17. Wlodzimierz Bryc, Abdelhamid Hassairi, One-Sided Cauchy-Stieltjes Kernel Families, **JOURNAL OF THEORETICAL PROBABILITY Vol. 24 Issue: 2** (2011), pag. 577–594
Citeaza: Serban T. Belinschi, Hari Bercovici, *Partially defined semigroups relative to multiplicative free convolution*, **International mathematics research notices, Issue 2**, (2005), pag. 65–101.

18. Gennadii P. Chistyakov, Friedrich Götze, The arithmetic of distributions in free probability theory, **Central European Journal of Mathematics, Vol. 9, No. 5** (2011), pag. 997–1050
Citeaza: Serban T. Belinschi, *The atoms of the free multiplicative convolution of two probability distributions,* **Integral Equations and Operator Theory, Vol. 46, No. 4**, (2003), pag. 377–386.

19. Jiun-Chau Wang, Limit theorems for additive conditionally free convolution, **Canadian Journal of Mathematics, Vol. 63, No. 1** (2011), pag. 222–240
Citeaza: Serban T. Belinschi, *C-free convolution for measures with unbounded support*, **Von Neumann algebras in Sibiu, Theta Ser. Adv. Math., 10, Theta, Bucharest,** (2008), pag. 1–7.

20. Jiun-Chau Wang, Limit theorems for additive conditionally free convolution, **Canadian Journal of Mathematics, Vol. 63, No. 1** (2011), pag. 222–240
Citeaza: Serban T. Belinschi, Hari Bercovici, *A new approach to subordination results in free probability*, **Journal d'Analyse Mathématique Vol. 101** (2007), pag. 357–365.

Beltita Daniel

1. M. Măntoiu, R. Purice, S. Richard, *Coherent states and pure state quantization in the presence of a variable magnetic field*, **Int. J. Geom. Methods Mod. Phys. 8** (2011), pag. 187–202
   Citează: I. Beltiţă şi D. Beltiţă, *Magnetic pseudo-differential Weyl calculus on nilpotent Lie groups*, **Ann. Global Anal. Geom. 36** (2009), pag. 293-322.

Boca Florin-Petre

1. M. Junge, M. Navascues, C. Palazuelos, D. Perez-Garcia, V. B. Scholz, R. F. Werner, Connes' embedding problem and Tsirelson's problem, **J. Math. Phys. 52** (2011), Art #012102
   Citeaza: F. Boca, *Free products of completely positive maps and spectral sets*, **J. Functional Analysis 97** (1991), pag. 251–263.

2. M. Popa, J.-C. Wang, On multiplicative conditionally free convolutions, **Trans. Amer. Math. Soc. 363** (2011), pag. 6309–6335
   Citeaza: F. Boca, *Free products of completely positive maps and spectral sets*, **J. Functional Analysis 97** (1991), pag. 251–263.

3. Z. Dong, Haagerup property for C^*-algebras, **J. Math. Analysis Appl. 377** (2011), pag. 631–644
   Citeaza: F. Boca, On the method of constructing irreducible finite index subfactors of Popa, **Pacific J. Math. 161** (1993), pag. 201–231.

4. J. P. Bannon, J. Fang, Some remarks on Haagerup's approximation property, **J. Operator Theory 65** (2011), pag. 403–417
   Citeaza: F. Boca, On the method of constructing irreducible finite index subfactors of Popa, **Pacific J. Math. 161** (1993), pag. 201–231.

5. K. De Commer, On projective representations for compact quantum groups, **J. Functional Analysis 260** (2011), pag. 3596–3644
   Citeaza: F. Boca, *Ergodic actions of compact matrix pseudogroups on C^*-algebras*, Recent Advances in Operator Algebras (Orléans 1992), **Astérisque 232** (1995), pag. 93–109.

6. D. Hadwin, Q. Li, J. Shen, Topological free entropy dimensions in nuclear C^*-algebras and in full free products of unital C^*-algebras, **Canadian J. Math. 63** (2011), pag. 551–590
   Citeaza: F.P. Boca, A note on full free product C^*-algebras, lifting and quasidiagonality, in *Operator Theory, Operator Algebras and Related Topics*, Proceedings of the OT16 Conference, Timişoara 1996, **The Theta Foundation, Bucharest, 1997**, pag. 51–63.

7. F. Luef, Projections in noncommutative tori and Gabor frames, **Proc. Amer. Math. Soc. 139** (2011), pag. 571-582
   Citeaza: F. Boca, *Projections in rotation algebras and theta functions*, **Comm. Math. Phys. 202** (1999), pag. 325–357.

8. J. Feng, Z. Y. Yang, K. Zhang, B. Y. Hou,K. J. Shi, Projection operator in rational noncommutative orbifold $\mathbb{T}^2/\mathbb{Z}_4$, **Comm. Theoretical Physics 56** (2011), pag. 107–118

Citeaza: F. Boca, *Projections in rotation algebras and theta functions*, **Comm. Math. Phys. 202** (1999), pag. 325–357.

9. S. Neshveyev, Von Neumann algebras arising from Bost-Connes type systems, **Int. Math. Res. Notices No.1** (2011), pag. 217–236
Citeaza: F. P. Boca, A. Zaharescu, Factors of type III and the distribution of prime numbers, **Proc. London Math. Soc. 80** (2000), pag. 145–178.

10. M. S. Xiong, A. Zaharescu, Correlation of fractions with divisibility constraints, **Math. Nachrichten 284** (2011), pag. 393–407
Citeaza: F. P. Boca, C. Cobeli, A. Zaharescu, *A conjecture of R. R. Hall on Farey points*, **J. Reine Angew. Mathematik 535 (2001)**, pag. 207–236.
F. P. Boca, R. N. Gologan, A. Zaharescu, The average length of a trajectory in a certain billiard in a flat two-torus, **New York J. Math. 9** (2003), pag. 303-330 (electronic).
F. P. Boca, A. Zaharescu, The correlations of Farey fractions, **J. London Math. Soc. 72** (2005), pag. 25–39.
F. P. Boca, A. Zaharescu, The distribution of the free path lengths in the periodic two-dimensional Lorentz gas in the small-scatterer limit, **Comm. Math. Phys. 269** (2007), pag. 425–471.

11. D. A. Badziahin, A. Haynes, A note on Farey fractions with denominators in arithmetic progressions, **Acta Arithmetica 147** (2011), pag. 205–215
Citeaza: F. P. Boca, C. Cobeli, A. Zaharescu, *A conjecture of R. R. Hall on Farey points*, **J. Reine Angew. Mathematik 535 (2001)**, pag. 207-236.
F. P. Boca, R. N. Gologan, A. Zaharescu, On the index of Farey sequences, **Quarterly J. Math. 53** (2002), pag. 377–391.
F. P. Boca, R. N. Gologan, A. Zaharescu, The average length of a trajectory in a certain billiard in a flat two-torus, **New York J. Math. 9** (2003), pag. 303-330 (electronic).

12. H. T. Ehrhardt, S. Roch, B. Silbermann, A strong Szegö-Widom limit theorem for operators with almost periodic diagonal, **J. Functional Analysis 260** (2011), pag. 30–75
Citeaza: F. P. Boca, *Rotation C^*-Algebras and Almost Mathieu Operators*, **The Theta Foundation, Bucharest, 2001**.

13. Y. Higuchi, T. Matsumoto, O. Ogurisu, On the spectrum of a discrete Laplacian on $\mathbb{Z}$ with finitely supported potential, **Linear and Multilinear Algebra 59** (2011), pag. 917–927
Citeaza: F. P. Boca, *Rotation C^*-Algebras and Almost Mathieu Operators*, **The Theta Foundation, Bucharest, 2001**.

14. J. Marklof, A. Strömbergsson, The periodic Lorentz gas in the Boltzmann-Grad limit: asymptotic estimates, **Geometric Analysis and Functional Analysis (GAFA) 21** (2011) pag. 560–647.
Citeaza: F. P. Boca, R. N. Gologan, A. Zaharescu, *The statistics of the trajectory in a certain billiard in a flat two-torus*, **Comm. Math. Phys. 240 (2003)**, pag. 53–73.
F. P. Boca, A. Zaharescu, The distribution of the free path lengths in the periodic two-dimensional Lorentz gas in the small-scatterer limit, **Comm. Math. Phys. 269** (2007), pag. 425–471.

15. J. Marklof, A. Strömbergsson, The Boltzmann-Grad limit of the periodic Lorentz gas, **Annals of Mathematics 174** (2011), pag. 225–298
Citeaza: F. P. Boca, A. Zaharescu, The distribution of the free path lengths in the periodic two-dimensional Lorentz gas in the small-scatterer limit, **Comm. Math. Phys. 269** (2007), pag. 425–471.

16. F. Chamizo, Hyperbolic lattice point problems, **Proc. Amer. Math. Soc. 139** (2011), pag. 451–459
Citeaza: F. P. Boca, *Distribution of angles between geodesic rays associated with hyperbolic lattice points*, **Quarterly J. Math. 58 (2007)**, pag. 281–295.

17. C. Eckhardt, A noncommutative Gauss map, **Mathematica Scandinavica 108** (2011), pag. 233–250
Citeaza: F. P. Boca, An AF algebra associated with the Farey tessellation, **Canadian J. Math. 60** (2008), pag. 975-1000.

18. D. Mundici, Finite axiomatizability in Łukasiewicz logic, **Annals of Pure and Applied Logic 162** (2011), pag. 1035–1947
Citeaza: F. P. Boca, An AF algebra associated with the Farey tessellation, **Canadian J. Math. 60** (2008), pag. 975-1000.

Bonciocat Anca Iuliana

1. J. Maas: *Gradient flows of the entropy for finite Markov chains*, **J. Funct. Anal., 261 (8)** (2011), pag. 2250 – 2292
Citeaza: A. I. Bonciocat, K. T. Sturm, *Mass transportation and rough curvature bounds for discrete spaces*, **J. Funct. Anal. 256, no. 9** (2009), pag. 2944 – 2966.

2. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: E. Alkan, A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Square-free criteria for polynomials using no derivatives,* **Proc. Amer. Math. Soc. 135** (2007), no. 3, 677 - 687.

3. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: A.I. Bonciocat and N.C. Bonciocat, *Some classes of irreducible polynomials*, **Acta Arith. 123** (2006) no. 4, pag. 349 - 360.

4. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr. 281** (2008) no. 9, pag. 1240 - 1253.

5. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138

Citeaza: A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Bounds for the multiplicities of the roots for some classes of complex polynomials*, **Math. Inequal. Appl. 9** (2006), no. 1, pag. 11 - 22.

6. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: A.I. Bonciocat and A. Zaharescu, *Irreducibility results for compositions of polynomials in several variables*, **Proc. Indian Acad. Sci. (Math. Sci.) 115 (2005)** no. 2, 117 - 126.

7. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: E. Alkan, A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Square-free criteria for polynomials using no derivatives*, **Proc. Amer. Math. Soc. 135** (2007), no. 3, pag. 677 - 687.

8. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *On the irreducibility of polynomials with leading coefficient divisible by a large prime power*, **Amer. Math. Monthly 116** (2009), no.8, pag. 743 - 745.

9. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull. 52 (4)** (2009), pag. 511-520.

10. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Bounds for the multiplicities of the roots for some classes of complex polynomials*, **Math. Inequal. Appl. 9** (2006), no. 1, pag. 11 - 22.

11. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141
Citeaza: A.I. Bonciocat and N.C. Bonciocat, *Some classes of irreducible polynomials*, **Acta Arith. 123** (2006) no. 4, pag. 349 - 360.

12. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr. 281** (2008) no. 9, 1240 - 1253.

13. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141

Citeaza: A.I. Bonciocat and A. Zaharescu, *Irreducibility results for compositions of polynomials in several variables*, **Proc. Indian Acad. Sci. (Math. Sci.) 115** (2005) no. 2, pag. 117 - 126.

14. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 54(102)** (2011) no. 1, pag. 41 – 54
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull. 52 (4)** (2009), pag. 511-520.

Bonciocat Nicolae Ciprian

1. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: E. Alkan, A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Square-free criteria for polynomials using no derivatives,* **Proc. Amer. Math. Soc. 135** (2007), no. 3, 677 - 687.

2. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: A.I. Bonciocat and N.C. Bonciocat, *Some classes of irreducible polynomials*, **Acta Arith. 123** (2006) no. 4, pag. 349 - 360.

3. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr. 281** (2008) no. 9, pag. 1240 - 1253.

4. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the irreducible factors of a multivariate polynomial*, **Comm. Algebra 39** (2011) no. 3, pag. 1131 – 1138
Citeaza: A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Bounds for the multiplicities of the roots for some classes of complex polynomials*, **Math. Inequal. Appl. 9** (2006), no. 1, pag. 11 - 22.

5. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: E. Alkan, A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Square-free criteria for polynomials using no derivatives*, **Proc. Amer. Math. Soc. 135** (2007), no. 3, pag. 677 - 687.

6. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *On the irreducibility of polynomials with leading coefficient divisible by a large prime power*, **Amer. Math. Monthly 116** (2009), no. 8, pag. 743 - 745.

7. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull. 52 (4)** (2009), pag. 511 - 520.

8. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinburgh Math. Soc. 54** (2011), pag. 587 – 598
Citeaza: A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *Bounds for the multiplicities of the roots for some classes of complex polynomials*, **Math. Inequal. Appl. 9** (2006), no. 1, pag. 11 - 22.

9. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141
Citeaza: A.I. Bonciocat and N.C. Bonciocat, *Some classes of irreducible polynomials*, **Acta Arith. 123** (2006) no. 4, pag. 349 - 360.

10. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr. 281** (2008) no. 9, 1240 - 1253.

11. N.C. Bonciocat, A. Zaharescu: *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141
Citeaza: N.C. Bonciocat, A. Zaharescu, *Irreducible multivariate polynomials obtained from polynomials in fewer variables*, **J. Pure Appl. Algebra 212** (2008), 2338 - 2343.

12. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 54(102)** (2011) no. 1, pag. 41 – 54
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull. 52 (4)** (2009), pag. 511 - 520.

13. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu: *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 54(102)** (2011) no. 1, pag. 41 – 54
Citeaza: N.C. Bonciocat and A. Zaharescu, *Irreducible multivariate polynomials obtained from polynomials in fewer variables*, **J. Pure Appl. Algebra 212** (2008), no. 10, pag. 2338 - 2343.

Brinzanescu Vasile

1. Marian Aprodu, Marius Marchitan, A note on vector bundles on Hirzebruch surfaces, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 687 – 690
Citeaza: M. Aprodu, V. Brinzanescu, *Fibres vectoriels de rang 2 sur les surfaces reglees*, **C. R. Acad. Sci. Paris, Ser. I 323 (6)** (1996), pag. 627 -630.

2. Marian Aprodu, Marius Marchitan, A note on vector bundles on Hirzebruch surfaces, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 687 – 690
Citeaza: M. Aprodu, V. Brinzanescu, *Stable rank-2 vector bundles over ruled surfaces*, **C. R. Acad. Sci. Paris, Ser. I 325 (3)** (1997), pag. 295 -300.

3. Marian Aprodu, Marius Marchitan, A note on vector bundles on Hirzebruch surfaces, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 687 – 690
Citeaza: M. Aprodu, V. Brinzanescu, *Beilinson type spectral sequences on scrolls, in: Moduli Spaces and Vector Bundles*, in:, **London Math. Soc. Lecture Note Ser., vol. 359**, Cambridge Univ. Press, Cambridge, 2009, pag. 426 -436.

4. Marian Aprodu, Marius Marchitan, A note on vector bundles on Hirzebruch surfaces, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 687 – 690
Citeaza: V. Brinzanescu, M. Stoia, *Topologically trivial algebraic 2-vector bundles on ruled surfaces I*, **Rev. Roumaine Math. Pures Appl. 29 (8)** (1984), pag. 661 -673.

5. Marian Aprodu, Marius Marchitan, A note on vector bundles on Hirzebruch surfaces, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 687 – 690
Citeaza: V. Brinzanescu, M. Stoia, *Topologically trivial algebraic 2-vector bundles on ruled surfaces II*, in: **Algebraic Geometry, Bucharest, 1982**, in: Lecture Notes in Math. vol. 1056, Springer, Berlin, 1984, pag. 34 -46.

6. Marian Aprodu, Marius Marchitan, A note on vector bundles on Hirzebruch surfaces, **C. R. Acad. Sci. Paris, Ser. I 349** (2011), pag. 687 – 690
Citeaza: V. Brinzanescu, *Holomorphic Vector Bundles over Compact Complex Surfaces*, **Lecture Notes In Mathematics**, vol. 1624, Springer-Verlag, Berlin 1996.

7. Neculae Dinuta, Roxanda Dinuta, The equations of generalized complex structures on complex 2-tori, **An. St. Univ. Ovidius Constanta, Vol. 19 (1)** (2011), pag. 67 – 74
Citeaza: V. Brinzanescu, *Holomorphic Vector Bundles over Compact Complex Surfaces*, **Lecture Notes In Mathematics**, vol. 1624, Springer-Verlag, Berlin 1996.

8. Neculae Dinuta, Roxanda Dinuta, The equations of generalized complex structures on complex 2-tori, **An. St. Univ. Ovidius Constanta, Vol. 19 (1)** (2011), pag. 67 – 74
Citeaza: V. Brinzanescu, O. A. Turcu, *Generalized complex structures on Kodaira surfaces*, **J. Geom. Phys., 60 (1)**, (2010), pag. 60 – 67.

9. Neculae Dinuta, Roxanda Dinuta, The equations of generalized complex structures on complex 2-tori, **An. St. Univ. Ovidius Constanta, Vol. 19 (1)** (2011), pag. 67 – 74
Citeaza: V. Brinzanescu, N. Dinuta, R. Dinuta, *Generalized complex structures on complex 2-tori*, **Bull. Math. Soc. Sci. Math. Roumanie, 52 (100)**, No. 3 (2009), pag. 263 – 270.

10. Neculae Dinuta, Roxanda Dinuta, The equations of generalized complex structures on complex 2-tori, **An. St. Univ. Ovidius Constanta, Vol. 19 (1)** (2011), pag. 67 – 74
Citeaza: Ligia Brinzanescu, Vasile Brinzanescu, and Neculae Dinuta: *The equations of*

generalized complex structures on Kodaira surfaces, **Analele Universitatii de Vest, Timisoara, Seria Matematica-Informatica, Vol. XLVIII, Fasc. 1-2** (2010), pag. 35 – 44

Buliga Marius

1. Amar El Hadji Bouya; Clamond D.; Fraysse N.; et al., Response of a noncohesive packing of grains to a localized force: Deviation from continuum elasticity , **PHYSICAL REVIEW E Volume: 83 Issue: 2** (2011), Article Number: 021304 DOI: 10.1103/PhysRevE.83.021304 Part: Part 1
Citeaza: Buliga Marius ; de Saxce Gery ; Vallee Claude , *Non Maximal Cyclically Monotone Graphs and Construction of a Bipotential for the Coulomb's Dry Friction Law* , **JOURNAL OF CONVEX ANALYSIS Volume: 17 Issue: 1** (2010), pag. 81–94

2. M. Prechtel, G. Leugering, P. Steinmann, M. Stingl, Towards optimization of crack resistance of composite materials by adjustment of fiber shapes, **Engineering Fracture Mechanics Volume: 78 Issue: 6** (2011), pag. 944–960
Citeaza: Buliga Marius ; *Energy minimizing brittle crack propagation.*, **J. Elasticity 52** (1998/99), pag. 201–238

3. Matei Andaluzia; Niculescu Constantin P., Weak solutions via bipotentials in mechanics of deformable solids, **JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS Volume: 379 Issue: 1** (2011), pag. 15–25
Citeaza: Buliga Marius ; de Saxce Gery ; Vallee Claude , *Bipotentials for Non-monotone Multivalued Operators: Fundamental Results and Applications*, **ACTA APPLICANDAE MATHEMATICAE Volume: 110 Issue: 2** (2010), pag. 955–972

4. Abdelmadjid Berga, Mathematical and numerical modeling of the non-associated plasticity of soils – Part 1: The boundary value problem, **International Journal of Non-Linear Mechanics Volume: 47 Issue:1** (2012), pag. 26–35
Citeaza: Buliga Marius ; de Saxce Gery ; Vallee Claude , *Existence and construction of bipotentials for graphs of multivalued laws*, **J. of Convex Analysis vol 15 no 1** (2008), pag. 87–104

5. Abdelmadjid Berga, Mathematical and numerical modeling of the non-associated plasticity of soils – Part 1: The boundary value problem, **International Journal of Non-Linear Mechanics Volume: 47 Issue:1** (2012), pag. 26–35
Citeaza: Buliga Marius ; de Saxce Gery ; Vallee Claude , *Bipotentials for Non-monotone Multivalued Operators: Fundamental Results and Applications*, **ACTA APPLICANDAE MATHEMATICAE Volume: 110 Issue: 2** (2010), pag. 955–972

6. Abdelmadjid Berga, Mathematical and numerical modeling of the non-associated plasticity of soils – Part 1: The boundary value problem, **International Journal of Non-Linear Mechanics Volume: 47 Issue:1** (2012), pag. 26–35
Citeaza: Buliga Marius ; de Saxce Gery ; Vallee Claude , *Blurred constitutive laws and bipotential convex covers*, **Mathematics and Mechanics of Solids 16, no. 2** (2011), pag. 161–171

7. Abdelmadjid Berga, Mathematical and numerical modeling of the non-associated plasticity of soils – Part 2: Finite element analysis, **International Journal of Non-Linear**

Mechanics Volume: 47 Issue:1 (2012), pag. 36–45
Citeaza: Buliga Marius ; de Saxce Gery ; Vallee Claude , *Existence and construction of bipotentials for graphs of multivalued laws*, **J. of Convex Analysis vol 15 no 1** (2008), pag. 87–104

Burciu Sebastian

1. S. Danz, The Depth of Some Twisted Group Algebra Extensions, **Communications in Algebra 39** (2011), pag. 1631–1645
Citeaza: S. Burciu, B. Külshammer and L. Kadison: *Depth of subgroups and multimatrix algebra inclusions*, **Int. Electr. J. Alg. 9** (2011), pag. 133 – 166

Capatina Anca

1. Pyatkov Sergey Grigir'evich, On some classes of inverse problems for parabolic equations, **Journal of inverse and ill-posed problems 3** (2011) *Citează*: A. Capatina, R. Stavre, *Optimal control in biconvective flow*, **J. Math. Kyoto Univ., 37, 4** (1997), pag. 585-595

2. Pyatkov S. G., On some classes of inverse problems for parabolic and elliptic equations, **Journal of evolution equations 3**, (2011) *Citează*: A. Capatina, R. Stavre, *Optimal control in biconvective flow*, **J. Math. Kyoto Univ., 37, 4** (1997), pag. 585-595

3. Boukrouche Mahdi, Existence, uniqueness and convergence of optimal control problems associated with parabolic variational inequalities of the second kind, **Nonlinear analysis-real world applications 8** (2011) *Citează*: A. Capatina, *Optimal control of a Signorini contact problem with friction*, **Numer. Funct. Anal. and Optimiz. 21, 7-8** (2000), pag. 817-828

4. M. Boukrouche, D. A. Tarzia, Convergence of distributed optimal control problems governed by elliptic variational inequalities, **Computational optimization and applications** (2011) *Citează*: A. Capatina, *Optimal control of a Signorini contact problem with friction*, **Numer. Funct. Anal. and Optimiz. 21, 7-8** (2000), pag. 817-828

5. F. Kuss, F. Lebon, Error estimation and mesh adaptation for Signorini-Coulomb problems using E-FEM, **Computers and Structures 89, 11-12 in Computational Fluid and Solid Mechanics** (2011), pag. 1148-1154 *Citează*: A. Capatina-Radoslovescu, M. Cocu, *Internal approximation of quasi-variational inequalities*, **Numer. Math. 59** (1991), pag. 385-398

Chiriacescu Gabriel

1. Abazari, Rasoul; Bahmanpour, Kamal: *Cofiniteness of extension functors of cofinite modules,* **Journal of Algebra, 330,(1)**,(2011), pag. 507–516.
Citeaza: G. Chiriacescu, *Cofiniteness of local cohomology modules over regular local rings*, **Bull. London Math. Soc., 32**, (2000), pag. 1–7

Cimpoeas Mircea

1. Mitchel Keller, Yi-Huang Shen, Noah Streib, Stephen Young, *On the Stanley depth of squarefree Veronese ideals*, **Journal of Algebraic Combinatorics v.33, no.2** (2011), 313–324)
Citeaza: Mircea Cimpoeas, *Stanley depth of square free Veronese ideals*, Preprint 2009.
Citeaza: Mircea Cimpoeas, *Stanley depth of complete intersection monomial ideals*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 51(99)(3)**, (2008), 205-211.

2. Gunnar Flystad, Jrgen Herzog, *Gröbner bases of syzygies and Stanley depth*, **Journal of Algebra, Volume 328, Issue 1** (2011), 178–189
Citeaza: Mircea Cimpoeas, *Stanley depth of square free Veronese ideals*, Preprint 2009.
Citeaza: Mircea Cimpoeas, *Some remarks on the Stanley depth for multigraded modules*, **Le Matematiche 63** (2008), 165-171.

Cipu Mihai

1. A. Pethő, V. Ziegler, On biquadratic fields that admit unit power integral bases, **Acta Math. Hung. 133** (2011), 221–241
Citează: M. Cipu, M. Bennett, M. Mignotte, R. Okazaki, *On the number of solutions of simultaneous Pell equations, II*, **Acta Arith., 122** (2006), 407–417

2. A. Pethő, V. Ziegler, On biquadratic fields that admit unit power integral bases, **Acta Math. Hung. 133** (2011), 221–241
Citează: M. Cipu, M. Mignotte, *On the number of solutions to systems of Pell equations*, **J. Number Theory 125** (2007), 356–392

Coanda Iustin

1. M. Hauzer, A. Langer, Moduli spaces of framed perverse instantons on $\mathbb{P}^3$, **Glasgow Math. J. 53** (2011), pag. 51–96
Citeaza: I. Coandă, *The Chern classes of the stable rank-3 vector bundles on* $\mathbb{P}^3$, **Math. Ann. 273** (1985), pag. 65–79

2. M. Hauzer, A. Langer, Moduli spaces of framed perverse instantons on $\mathbb{P}^3$, **Glasgow Math. J. 53** (2011), pag. 51–96
Citeaza: I. Coandă, A. Tikhomirov, G. Trautmann, *Irreducibility and smoothness of the moduli space of mathematical 5-instantons over* $\mathbb{P}^3$, **Internat. J. Math. 14** (2003), pag. 1–45

3. I.B. Penkov, A.S. Tikhomirov, Triviality of vector bundles on twisted ind-Grassmannians, **Sbornik Mathematics 202** (2011), pag. 61–99
Citeaza: I. Coandă, G. Trautmann, *The splitting criterion of Kempf and the Babylonian tower theorem*, **Comm. Algebra 34** (2006), pag. 2485–2488

4. M. Jardim, M. Verbitsky, Moduli spaces of instanton bundles on $\mathbb{CP}^3$ and twistor sections of moduli spaces of instantons on $\mathbb{C}^2$, **Adv. Math. 227** (2011), pag. 1526–1538
Citeaza: I. Coandă, A. Tikhomirov, G. Trautmann, *Irreducibility and smoothness of the moduli space of mathematical 5-instantons over* $\mathbb{P}^3$, **Internat. J. Math. 14** (2003), pag. 1–45

5. M. Jardim, R.V. Martins, The ADHM variety and perverse coherent sheves, **Journal of Geometry and Physics 61** (2011), pag. 2219–2232
Citeaza: I. Coandă, A. Tikhomirov, G. Trautmann, *Irreducibility and smoothness of the moduli space of mathematical 5-instantons over* $\mathbb{P}^3$, **Internat. J. Math. 14** (2003), pag. 1–45

6. P.M. Marques, R.-M. Miró-Roig, Stability of syzygy bundles, **Proc. Amer. Math. Soc. 139** (2011), pag. 3155–3170
Citeaza: I. Coandă, *On the stability of syzygy bundles*, **Internat. J. Math. 22** (2011), pag. 515-534

Cobeli Cristian

1. Badziahin, Dmitry A.; Haynes, Alan K., A note on Farey fractions with denominators in arithmetic progressions, **Acta Arith. 147, no. 3,** (2011), pag. 205–215.
   Citeaza: Boca, Florin P.; Cobeli, Cristian; Zaharescu, Alexandru, *A conjecture of R. R. Hall on Farey points*, **J. Reine Angew. Math. 535,** (2001), pag. 207–236.

2. Sun, Zhi-Wei; Zhang, Wei, Binomial coefficients and the ring of p-adic integers, **Proc. Amer. Math. Soc. 139, no. 5,** (2011), pag. 1569–1577.
   Citeaza: Cobeli, C.; Vâjâitu, M.; Zaharescu, A., *The sequence* $n!$ (mod p), **J. Ramanujan Math. Soc. 15, no. 2,** (2000), pag. 135–154.

Cojocaru Alina-Carmen

1. K. James, E. Smith, Average Frobenius distribution for elliptic curves defined over finite Galois extensions of the rationals, **Math. Proc. Cambridge Philos. Soc. 150 no. 3** (2011), 439 – 458
   Citeaza: A.C. Cojocaru, M. R. Murty, *An introduction to sieve methods and their applications*, **London Math. Society Student Texts 66** (2006).

2. Y. Bilu, P. Parent, Serre's unifomity problem in the split Cartan case, **Annals of Math. (2) 173 no 1** (2011), 569–584.
   Citeaza: A.C. Cojocaru, C. Hall *Uniform results for Serre's theorem for elliptic curves*, **Int. Math. Res. Not. no 50** (2005), 3065–3080.

3. Y. Bilu, P. Parent, Serre's unifomity problem in the split Cartan case, **Annals of Math. (2) 173 no 1** (2011), 569–584.
   Citeaza: A.C. Cojocaru *On the surjectivity of the Galois representations associated to non-CM elliptic curves*, **Canadian Math. Bulletin 48 no. 1** (2005), 16–31.

4. K. Joshi, C. Mcleman, Infinite Hilbert class field towers from Galois representations, **Int. J. Number Theory 7 no 1** (2011), 1–8. *Citeaza*: A.C. Cojocaru *On the surjectivity of the Galois representations associated to non-CM elliptic curves*, **Canadian Math. Bulletin 48 no. 1** (2005), 16–31.

Diaconescu Razvan

1. F. Horozal, F. Rabe: *Representing model theory in a type-theoretical logical framework*, **Theoretical Computer Science 412(37)** (2011), pg 4919–4945
   Citează: R. Diaconescu: *Proof systems for institutional logic*, **Journal of Logic and Computation 16(3)**, (2006), pag. 339–357.

2. F. Horozal, F. Rabe: *Representing model theory in a type-theoretical logical framework*, **Theoretical Computer Science 412(37)** (2011), pg 4919–4945
   Citează: T. Mossakowski, J. Goguen, R. Diaconescu, A. Tarlecki: *What is a Logic?*, în **Logica Universalis**, editor Jean-Yves Beziau, Birkhäuser (2005) pag. 113–133.

3. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)**, (2011), pag. 108–117.
   Citează: R. Diaconescu, K. Futatsugi: *Logical foundations of CafeOBJ*, **Theoretical Computer Science 285(2)**, (2002) pag. 289-318.

4. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)**, (2011), pag. 108–117.
   Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

5. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)**, (2011), pag. 108–117.
   Citează: R. Diaconescu, K. Futatsugi: **CafeOBJ report: The Language, Proof Techniques, and Methodologies for Object-Oriented Algebraic Specification**, World Scientific (1998).

6. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)**, (2011), pag. 108–117.
   Citează: J. Goguen, R. Diaconescu: *Towards an algebraic semantics for the object paradigm*, **Lecture Notes in Computer Science 785**, (1994) pag. 1–34.

7. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)**, (2011), pag. 108–117.
   Citează: R. Diaconescu, K. Futatsugi: *Behavioural coherence in object-oriented algebraic specification*, **Universal Computer Science 6(1)**, (2000) pag. 74–96.

8. R. Diaconescu: *Coinduction for preordered algebras*, **Information and Computation 209(2)**, (2011), pag. 108–117.
   Citează: R. Diaconescu: *Jewels of institution-indepedendent model theory*, **Lecture Notes in Computer Science 4060)**, Springer (2006), pag. 65–98.

9. R. Diaconescu: *Grothendieck Inclusion Systems*, **Applied Categorical Structures 19(5)**, (2011) pag. 783–802.
   Citează: R. Diaconescu, K. Futatsugi: *Logical foundations of CafeOBJ*, **Theoretical Computer Science 285(2)**, (2002) pag. 289-318.

10. R. Diaconescu: *Grothendieck Inclusion Systems*, **Applied Categorical Structures 19(5)**, (2011) pag. 783–802.
    Citează: R. Diaconescu: *Extra theory morphisms for institutions: logical semantics for multi-paradigm languages*, **Applied Categorical Structures 6(4)**, (1998) pag. 427–453.

11. R. Diaconescu: *Grothendieck Inclusion Systems*, **Applied Categorical Structures 19(5)**, (2011) pag. 783–802.
    Citează: R. Diaconescu: *Grothendieck institutions*, **Applied Categorical Structures 10(4)**, (2002) pag. 383–402.

12. R. Diaconescu: *Grothendieck Inclusion Systems*, **Applied Categorical Structures 19(5)**, (2011) pag. 783–802.
    Citează: R. Diaconescu: *Elementary diagrams in institutions*, **J. Logic and Computation 14(5)**, (2004) pag. 651–674.

13. R. Diaconescu: *Grothendieck Inclusion Systems*, **Applied Categorical Structures 19(5)**, (2011) pag. 783–802.
    Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

14. R. Diaconescu: *Grothendieck Inclusion Systems*, **Applied Categorical Structures 19(5)**, (2011) pag. 783–802.
Citează: Răzvan Diaconescu, Joseph Goguen, Petros Stefaneas: *Logical support for modularization*, în **Logical Environments**, editori G. Huet şi G. Plotkin, (1993) Cambridge Univ. Press, pag. 83–130.

15. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: *Herbrand theorems in arbitrary institutions*, **Information Processing Letters 90**, (2004), pag. 29–37.

16. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: *Institution-independent Ultraproducts*, **Fundamenta Informaticæ 55(3-4)**, (2003) pag. 321–348.

17. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu, J. Goguen: *An Oxford survey of order sorted algebra,* **Mathematical Structures in Computer Science 4(4)** (1994) pag. 363–392

18. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu, J. Goguen, P. Stefaneas: *Logical support for modularization*, în **Logical Environments**, editori G. Huet şi G. Plotkin, (1993) Cambridge Univ. Press, pag. 83–130.

19. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu, K. Futatsugi: **CafeOBJ report: The Language, Proof Techniques, and Methodologies for Object-Oriented Algebraic Specification**, World Scientific (1998).

20. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: *Interpolation for predefined types*, **Mathematical Structures in Computer Science** DOI:10.1017/S0960129511000430

21. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: **Category-based Semantics for Equational and Constraint Logic Programming**, D.Phil thesis, University of Oxford, (1994).

22. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: *Category-based constraint logics*, **Mathematical Structures in Computer Science 10(3)** (2000), pag. 373–407.

23. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

24. R. Diaconescu: *Structural Induction in Institutions*, **Information and Computation 209(9)** (2011), pag. 1197–1222.
Citează: R. Diaconescu: *On quasi-varieties of multiple valued logic models*, **Mathematical Logic Quarterly 57(2)** (2011), pag. 194–203.

25. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.
Citează: R. Diaconescu: *An institution-independent proof of Craig interpolation theorem*, **Studia Logica 77(1))**, (2004) pag. 59–79.

26. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.
Citează: R. Diaconescu: *Elementary diagrams in institutions*, **J. Logic and Computation 14(5)**, (2004) pag. 651–674.

27. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.
Citează: R. Diaconescu, K. Futatsugi: **CafeOBJ report: The Language, Proof Techniques, and Methodologies for Object-Oriented Algebraic Specification**, World Scientific (1998).

28. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

29. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.
Citează: R. Diaconescu, J. Goguen, P. Stefaneas: *Logical support for modularization*, în **Logical Environments**, editori G. Huet şi G. Plotkin, (1993) Cambridge Univ. Press, pag. 83–130.

30. R. Diaconescu, I. Ţuţu: *On the Algebra of Structured Specifications*, **Theoretical Computer Science 412(28)** (2011), pag. 3145–3174.
Citează: R. Diaconescu, J. Goguen: *An Oxford survey of order sorted algebra,* **Mathematical Structures in Computer Science 4(4)** (1994) pag. 363–392

31. R. Diaconescu: *On quasi-varieties of multiple valued logic models*, **Mathematical Logic Quarterly 57(2)** (2011), pag. 194–203.
Citează: R. Diaconescu: *Herbrand theorems in arbitrary institutions*, **Information Processing Letters 90**, (2004), pag. 29–37.

32. R. Diaconescu: *On quasi-varieties of multiple valued logic models*, **Mathematical Logic Quarterly 57(2)** (2011), pag. 194–203.
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

Diaconu Calin Adrian

1. H. Kim, *Second moments of holomorphic Hilbert modular forms and subconvexity,* **Acta Arith. 146, no. 4** (2011), pag. 319–333,
Citeaza: A. Diaconu şi P. Garrett, *Subconvexity bounds for automorphic L–functions,* **J. Inst. Math. Jussieu 9, no. 1** (2010), pag. 95–124.

2. A. R. Booker şi M. Krishnamurthy, *A strengthening of the $GL(2)$ converse theorem,* **Compos. Math. 147, no. 3** (2011), pag. 669–715,
Citeaza: A. Diaconu şi P. Garrett, *Integral moments of automorphic L–functions,* **J. Inst. Math. Jussieu 8, no. 2** (2009), pag. 335–382.

3. V. Blomer, *Subconvexity for a double Dirichlet series,* **Compos. Math. 147** (2011), pag. 355–374,
Citeaza: A. Diaconu, D. Goldfeld şi J. Hoffstein, *Multiple Dirichlet series and moments of zeta and L–functions,* **Compos. Math. 139** (2003), pag. 297–360.

Dragan Vasile

1. Li, W.; Jia, Y.;, Consensus-based distributed information filter for a class of jump Markov systems, **Control Theory and Applications, IET, 5, 10**, (2011), 1214–1222
Citeaza: V. Dragan, T. Morozan, *Discrete-time Riccati type equations and the tracking problem,*, **ICIC Express Letters, 2, 2,** (2008), pag. 109 – 116.

2. Shuxia Ye, Weiqun Wang, Yun Zou and Huiling Xu, Non-Fragile Robust Guaranteed Cost Control of 2-D Discrete Uncertain Systems Described by the General Models, **Circuits, Systems, and Signal Processing, 30, 5**, (2011), 899–914
Citeaza: V. Dragan, T. Morozan, *Discrete-time Riccati type equations and the tracking problem,*, **ICIC Express Letters, 2, 2,** (2008), pag. 109 – 116.

3. Oswaldo L.V. Costa ., Guilherme R.A.M. Benites, Linear minimum mean square filter for discrete-time linear systems with Markov jumps and multiplicative noises, **Automatica, 47** (2011), 466 –476
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

4. Zhao-Yan Li; Bin Zhou; Yong Wang; Guang-Ren Duan, On Eigenvalue Sets and Convergence Rate of It Stochastic Systems With Markovian Switching, **IEEE Transaction on Automatic Control, 56, (5)** (2011), 1118–1124
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

5. Hou T.; Zhang W.; Ma H., Essential instability and essential destabilisation of linear stochastic systems, **Control Theory and Applications, IET, 5, (2)** (2011), 334- 340
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

6. Ran Huang, Yan Lin, Zhongwei Lin, Robust H2 fuzzy observer-based tracking control design for a class of nonlinear stochastic Markovian jump systems, **Asian Journal of Control (AJC), 14, (6)** DOI: 10.1002/asjc.313 (2011), 1–15 (published in 2012)
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

7. Marcos G.; Fragoso M. D., On the robust stability, stabilization, and stability radii of continuous-time infinite Markov jump linear systems, **SIAM J. Control Optim., 49, (3)** (2011), 1171–1196
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

8. Seroka Ewelina; Socha Lestaw, Stabilizability of a class of stochastic bilinear hybrid systems, **JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS Volume: 384, (2)** (2011), 658– 669
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

9. Wenjun Xionga, Daniel W.C. Hob, Jinde Caoc, Dynamical analysis of a game network, **Nonlinear Analysis: Real World Applications 12, 4,** (2011), 2286–2293
Citeaza Peng Shi; Dragan, V., *Asymptotic H_∞ control of singularly perturbed systems with parametric uncertainties*, **IEEE Trans. on Automatic Control, 44, 9** (1999), pag. 1738–1742.

10. Lei Zhou; Guoping Lu, Robust Stability of Singularly Perturbed Descriptor Systems With Nonlinear Perturbation, **IEEE Trans. on Automatic Control, 56, 4** (2011), 858–863
Citeaza Peng Shi; Dragan, V., *Asymptotic H_∞ control of singularly perturbed systems with parametric uncertainties*, **IEEE Trans. on Automatic Control, 44, 9** (1999), pag. 1738–1742.

11. Todorov M. G.; Fragoso M. D., On the robust stability, stabilization, and stability radii of continuous-time infinite Markov jump linear systems, **SIAM J. Control Optim. 49, (3)** (2011), 1171–1196
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

12. Zhongwei Lina, Jizhen Liua, Weihai Zhangb, Yuguang Niua, Stabilization of interconnected nonlinear stochastic Markovian jump systems via dissipativity approach, **Automatica In Press, doi:10.1016/j.automatica.2011.09.008,** (2011).
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

13. Hongbin Zhang, Gang Feng, Chuangyin Dang, An Approach to H? Control of a Class of Nonlinear Stochastic Systems, **Circuits, Systems, and Signal Processing,DOI: 10.1007/s00034-011-9281-1Online First** (2011).
Citeaza: Dragan V ; Halanay A ; Stoica A, *The gamma-attenuation problem for systems with state dependent noise*, **STOCHASTIC ANALYSIS AND APPLICATIONS, 17, 3** (1998), pag. 395 –404.

14. Alterman I.; Mirkin L., On the robustness of sampled-data systems to uncertainty in continuous-time delays, **IEEE Trans. Automat. Control 56** (2011), 686 – 692
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, *MATHEMATICAL METHODS IN ROBUST CONTROL OF DISCRETE-TIME LINEAR STOCHASTIC SYSTEMS,* **Springer, New York,** (2010), 346 pagini.

15. S. Aberkane, Stochastic stabilization of a class of nonhomogeneous Markovian jump linear systems, **Systems Control Lett. 60, (3)** (2011), 156–160
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, *MATHEMATICAL METHODS IN ROBUST CONTROL OF DISCRETE-TIME LINEAR STOCHASTIC SYSTEMS,* **Springer, New York,** (2010), 346 pagini.

16. Jianzhou Liua, Juan Zhanga, The existence uniqueness and the fixed iterative algorithm of the solution for the discrete coupled algebraic Riccati equation, **International Journal of Control, 84, 8,** (2011), 1430-1441,
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, *MATHEMATICAL METHODS IN ROBUST CONTROL OF DISCRETE-TIME LINEAR STOCHASTIC SYSTEMS,* **Springer, New York,** (2010), 346 pagini.

17. Aberkane S., Stochastic stabilization of a class of nonhomogeneous Markovian jump linear systems, **Systems Control Lett., 60, 3** (2011), 156– 160
Citeaza: Dragan Vasile; Morozan Toader; Stoica Adrian, H^2 *optimal control for linear stochastic systems*, **Automatica J. IFAC, 40** (2004), pag. 1103–1113.

18. Hou T.; Zhang W.; Ma H., Essential instability and essential destabilisation of linear stochastic systems, **Source: IET CONTROL THEORY AND APPLICATIONS, 5, 2** (2011), 334–340
Citeaza: Dragan Vasile; Morozan Toader; Stoica Adrian, H^2 *optimal control for linear stochastic systems*, **Automatica J. IFAC, 40** (2004), pag. 1103–1113.

19. Shiguo Peng, Yun Zhang, Siming YuGlobal, Global mean-square exponential stabilization of stochastic system with time delay via impulsive control, **Asian Journal of Control, Article first published online: 14 JUL 2011, DOI: 10.1002/asjc.235** *Citeaza*: Dragan Vasile; Morozan Toader; Stoica Adrian, H^2 *optimal control for linear stochastic systems*, **Automatica J. IFAC, 40** (2004), pag. 1103–1113.

20. Gershon E.; Shaked U., Robust H(infinity) output-feedback control of retarded state-multiplicative stochastic systems, **INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL, 21, 11** (2011), 1283–1296
Citeaza: V. Dragan, T. Morozan, *Mixed input-output optimization for time varying It systems with state-dependent noise*, **Dynam. Contin. Discrete Impuls. Systems 3, 3** (1997), pag. 317–333.

21. Garcia-Ligero M. J.; Hermoso-Carazo A.; Linares-Perez J., Derivation of centralized and distributed filters using covariance information, **COMPUTATIONAL STATISTICS and DATA ANALYSIS, 55, 1** (2011), 312– 323
Citeaza: V. Dragan, T. Morozan, *Mixed input-output optimization for time varying It systems with state-dependent noise*, **Dynam. Contin. Discrete Impuls. Systems 3, 3** (1997), pag. 317–333.

22. Gershon E.; Shaked U., Robust H(infinity) output-feedback control of retarded state-multiplicative stochastic systems, **INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL, 21, 11** (2011), 1283–1296
Citeaza: V. Dragan, T. Morozan, A. Halanay, *Optimal stabilizing compensator for linear systems with state-dependent noise*, **Stochastic Anal. Appl. 10, 5** (1992), pag. 557 –572.

23. Costa Oswaldo L. V.; Benites Guilherme R. A. M., Linear minimum mean square filter for discrete-time linear systems with Markov jumps and multiplicative noises, **AUTOMATICA, 47, 3** (2011), 466 – 476
Citeaza: Dragan Vasile ; Morozan Toader, *Observability and detectability of a class of discrete-time stochastic linear systems*, **IMA JOURNAL OF MATHEMATICAL CONTROL AND INFORMATION, 23, 3** (2006), pag. 371–394.

24. Liu Andrew R.; Bitmead Robert R., Stochastic observability in network state estimation and control, **AUTOMATICA, 47, 1** (2011), 65 – 78
Citeaza: Dragan Vasile ; Morozan Toader, *Observability and detectability of a class of discrete-time stochastic linear systems*, **IMA JOURNAL OF MATHEMATICAL CONTROL AND INFORMATION, 23, 3** (2006), pag. 371–394.

25. Oswaldo L.V. Costa ., Guilherme R.A.M. Benites, Linear minimum mean square filter for discrete-time linear systems with Markov jumps and multiplicative noises, **Automatica, 47** (2011), 466 –476
Citeaza: Dragan Vasile ; Morozan Toader, *Observability and detectability of a class of discrete-time stochastic linear systems*, **IMA JOURNAL OF MATHEMATICAL CONTROL AND INFORMATION, 23, 3** (2006), pag. 371–394.

26. Liu Jianzhou; Zhang Juan, The existence uniqueness and the fixed iterative algorithm of the solution for the discrete coupled algebraic Riccati equation, **INTERNATIONAL JOURNAL OF CONTROL, 84, 8** (2011), 1430 – 1441
Citeaza: Dragan Vasile, *The linear quadratic optimization problem for a class of singularly perturbed stochastic systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 1, 1** (2005), pag. 53 –63.

27. Liu Jianzhou; Zhang Juan, Upper solution bounds of the continuous coupled algebraic Riccati matrix equation, **INTERNATIONAL JOURNAL OF CONTROL, 84, 4** (2011), 726 –736
Citeaza: Dragan Vasile, *The linear quadratic optimization problem for a class of singularly perturbed stochastic systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 1, 1** (2005), pag. 53 –63.

28. Sagara Muneomi; Mukaidani Hiroaki; Dragan Vasile, Near-optimal control for multiparameter singularly perturbed stochastic systems, **OPTIMAL CONTROL APPLICATIONS and METHODS, 32, 1** (2011), 113–125
Citeaza: Dragan Vasile, *The linear quadratic optimization problem for a class of singularly perturbed stochastic systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 1, 1** (2005), pag. 53 –63.

29. Dombrovskii V. V.; Ob"edko T. Yu, Predictive control of systems with Markovian jumps under constraints and its application to the investment portfolio optimization, **AUTOMATION AND REMOTE CONTROL, 72, 5** (2011), 989–1003
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problems for a class of linear stochastic systems with multiplicative white noise and Markovian jumping*, **IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 49, 5** (2004), pag. 665–675.

30. Chen Bei; Niu Yugang; Huang Heqing, Output feedback control for stochastic Markovian jumping systems via sliding mode design, **OPTIMAL CONTROL APPLICATIONS and METHODS, 32, 1** (2011), 83–94
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problems for a class of linear stochastic systems with multiplicative white noise and Markovian jumping*, **IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 49, 5** (2004), pag. 665–675.

31. Ran Huang, Yan Lin, Zhongwei Lin, Sliding mode H? control design for uncertain nonlinear stochastic state-delayed Markovian jump systems with actuator failures, **Nonlinear Analysis: Hybrid Systems, 5, 4**, (2011), pag. 692 –703
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problems for a class of linear stochastic systems with multiplicative white noise and Markovian jumping*, **IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 49, 5** (2004), pag. 665–675.

32. Yin Yanyan; Shi Peng; Liu Fei, Gain-scheduled PI tracking control on stochastic nonlinear systems with partially known transition probabilities, **JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, 348, 4** (2011), 685 – 702
Citeaza: Dragan V ; Shi P ; Boukas EK, *Control of singularly perturbed systems with Markovian jump parameters: an H(infinity) approach*, **AUTOMATICA, 35, 8** (1999), pag. 1369 –1378.

33. Oswaldo L.V. Costa ., Guilherme R.A.M. Benites, Linear minimum mean square filter for discrete-time linear systems with Markov jumps and multiplicative noises, **Automatica, 47** (2011), 466 –476
Citeaza: V.Dragan, T. Morozan, *Mean Square Exponential Stability for some Stochastic Linear Discrete Time Systems*, **European Journal of Control, 12, 4,** (2006), pag. 373 – 396.

34. Oswaldo L.V. Costa, Guilherme R.A.M. Benites, Linear minimum mean square filter for discrete-time linear systems with Markov jumps and multiplicative noises, **Automatica, 47** (2011), 466 –476
Citeaza: A. M. Stoica, V. Dragan, I. Yaesh, *Kalman-type filtering for stochastic systems with state-dependent noise and Markovian jumps*, **Proceedings of the 15th IFAC symposium on system identification, Saint-Maio, France**, (2009), pag. 13751380.

35. Ting Hou, Weihai Zhang, Hongji Ma, Some properties of exact observability of linear stochastic systems and their applications, **Asian journal of Control,Article first published online: 28 APR 2011, DOI: 10.1002/asjc.391** (2011),
Citeaza: V. Dragan, T. Morozan , *Stochastic observability and applications,*, **IMA Journal of Mathematical Control and Information, 21,** (2004), pag. 323-344.

Ene Horia

1. H. I. Ene and E. Sanchez-Palencia - Equations et phenomenes de surface pour l'ecoulement dans un modele de milieu poreux, Journal de Mecanique, vol.4 (1975) pp.73-108 a fost citata in: L. Badea, M. Discacciati, A. Quaternioni - Numerical Analysis of the Navier-Stokes/Darcy coupling, Numeriche Mathematik , vol.115 (2011), nr.2, pp.195-227; G. N. Gatica, R. Oyrzua, F. J. Sayas - Analysis of Fully-Mixed Finite Element Methods for the Stokes-Darcy Coupled Problem, Mathematics of Computation, vol. 80 (2011), nr.276, pp.191-198

2. H. I. Ene, D. Polisevski - Thermal Flow in Porous Media, Reidel Publishing Co. , Dordrecht (1987) a fost citata in: A.K.Singh, P.Aguihotri, N.P.Singh - Transient and non-Darcy effects on natural convection flow in a vertical channel partially filled with porous mediun: Analysis with Forcheimer-Brinkmann extended Darcy model, International Journal of Heat and Mass Transfer, vol.54 (2011) Issues 5-6, pp.1111-1120

3. J. L. Auriault, H. I. Ene - Macroscopic modelling of heat transfer in composites with interfacial thermal barrier, International Journal of Heat and Mass Transfer, vol.37 (1994), nr.18, pp.2885-2892 a fost citata in: S.P. Fortes, R.P. Lipton, S. P. Shipman - Sub-wavelength plasmotic crystals: dispersion relations and effectve properties, Proc. Royal Soc. A, vol.411 (2010) ,nr.2119, pp.1993-2020; F. Matt, M. E. Cruz - Heat Conduction in Two-Phase Composites with Three-Dimensional Microstructure and Interfacial Thermal Resistance, Advanced Structural Materials, vol.22 (2011) pp.63-97; P. Donato, K.H. Le Nguyen, R. Tardieu - The periodic unfolding method for a class of imperfect transmission problems, J. Mathematical Sciences, vol.178 (2011) nr. 6 pp.891-927

4. H. I. Ene, D. Polisevschi - Model of diffusion in partially fissured media, ZAMP , vol. 53 (2002) pp.1052-1059 a fost citata in: P. Donato, K.H. Le Nguyen, R. Tardieu - The periodic unfolding method for a class of imperfect transmission problems, J. Mathematical Sciences, vol.178 (2011) nr.6 pp.891-927; P. Donato, A. Piatnitski - On the effective interfacial resistence through rough surfaces, Communications in Pures and Applied Analysis, vol.9 (2011), nr.5, pp.1298-1310

Enescu Florian

1. Sharp, Rodney Y.; Yoshino, Yuji Right and left modules over the Frobenius skew polynomial ring in the F-finite case. **Math. Proc. Cambridge Philos. Soc. 150 no. 3, 419438,** (2011), pag. 419-438
   Citeaza: Enescu Florian, *Local cohomology and F-stability*, **J. Algebra 322 (2009), no. 9, 30633077**

Fulger Mihai

1. Holger Brenner and Axel Stabler, *Dagger closure and solid closure in graded dimension two*, **arXiv.org:1104.3748** (2011), pag. 1–26
   Citeaza: Mihai Fulger, *The cones of effective cycles on projective bundles over curves*, **arXiv:0910.370v1** (2009), pag. 1-13

2. Sebastien Boucksom, Tommaso De Fernex, Charles Favre, *The volume of an isolated singularity*, **arXiv:1011.2847v3 [math.AG]** (2011), pag. 1–40
   Citeaza: Mihai Fulger, *Local volumes on normal algebraic varieties*, **arXiv:1105.2981v1 [math.AG]** (2011), pag. 1-43

Gheondea Aurelian

1. Duggal B. P, Quantum effects, sequential independence and majorization, **LINEAR ALGEBRA AND ITS APPLICATIONS Volume: 435 Issue: 12** (2011), pag. 3014-3023
: A. Gheondea, S. Gudder, *Sequential product of quantum effects*, **Proc. Amer. Math. Soc., 132** (2004), pag. 503–512.

2. Dou Yan-Ni; Du Hong-Ke, A note on operator probability theory involving numerical ranges, **LINEAR ALGEBRA AND ITS APPLICATIONS Volume: 435 Issue: 12** (2011), pag. 3233-3242
Citeaza: A. Arias, A. Gheondea, and S. Gudder , *Fixed points of quantum operations*, **J. Mathematical Physics, 43** (2002), pag. 5872–5881.

3. Li Yuan, Fixed points of dual quantum operations, **JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS Volume: 382 Issue: 1** (2011), pag. 172-179
Citeaza: A. Arias, A. Gheondea, and S. Gudder , *Fixed points of quantum operations*, **J. Mathematical Physics, 43** (2002), pag. 5872–5881.

4. Benhida Chafiq; Gorkin Pamela; Timotin Dan , Numerical Ranges of C(0)(N) Contractions, **INTEGRAL EQUATIONS AND OPERATOR THEORY Volume: 70 Issue: 2** (2011), pag. 265–279.
Citeaza: Gr. Arsene and A. Gheondea , *Completing matrix contractions*, **Journal of Operator Theory, vol. 7** (1982), pag. 179–189.

5. Prunaru Bebe, Fixed points for Luders operations and commutators, **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 44 Issue: 18** (2011), Article Number: 185203
Citeaza: A. Arias, A. Gheondea, and S. Gudder , *Fixed points of quantum operations*, **J. Mathematical Physics, 43** (2002), pag. 5872–5881.

6. Li Yuan, Characterizations of fixed points of quantum operations, **JOURNAL OF MATHEMATICAL PHYSICS Volume: 52 Issue: 5** (2011), Article Number: 052103
Citeaza: A. Arias, A. Gheondea, and S. Gudder , *Fixed points of quantum operations*, **J. Mathematical Physics, 43** (2002), pag. 5872–5881.

7. Li Yuan, Characterizations of fixed points of quantum operations, **JOURNAL OF MATHEMATICAL PHYSICS Volume: 52 Issue: 5** (2011), Article Number: 052103
Citeaza: A. Gheondea, S. Gudder, *Sequential product of quantum effects*, **Proc. Amer. Math. Soc., 132** (2004), pag. 503–512.

8. Li Yuan, Characterizations of fixed points of quantum operations, **JOURNAL OF MATHEMATICAL PHYSICS Volume: 52 Issue: 5** (2011), Article Number: 052103
Citeaza: A. Gheondea, S. Gudder, P. Jonas, On the infimum of quantum effects. **J. Math. Phys. 46 no. 6** (2005), Article Number: 062102.

9. Saleh Ossama A.; Smith Ronald L., The elliptic matrix completion problem, **LINEAR ALGEBRA AND ITS APPLICATIONS Volume: 434 Issue: 8** (2011), pag. 1824–1835.
Citeaza: T. Constantinescu and A. Gheondea, *The negative signature of some Hermitian matrices*, **Linear Algebra and its Applications, 178** (1993), 178–42.

10. Li Yuan; Sun Xiu-Hong, Sequential Product and Jordan Product of Quantum Effects, **INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 50 Issue: 4** (2011), pag. 1206–1213.
Citeaza: A. Gheondea, S. Gudder, *Sequential product of quantum effects*, **Proc. Amer. Math. Soc., 132** (2004), pag. 503–512.

11. Li Yuan; Sun Xiu-Hong, Sequential Product and Jordan Product of Quantum Effects, **INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 50 Issue: 4** (2011), pag. 1206–1213.
Citeaza: A. Gheondea, S. Gudder, P. Jonas, On the infimum of quantum effects. **J. Math. Phys. 46 no. 6** (2005), Article Number: 062102.

12. Li Longsuo; Luo Laizhen; Wu Junde , Some Problems for Sequential Effect Algebras, **NTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 50 Issue: 4** (2011), pag. 1214-1219.
Citeaza: A. Gheondea, S. Gudder, *Sequential product of quantum effects*, **Proc. Amer. Math. Soc., 132** (2004), pag. 503–512.

13. Long Long, A Class of General Quantum Operations, **NTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 50 Issue: 4** (2011), pag. 1319–1324.
Citeaza: A. Arias, A. Gheondea, and S. Gudder , *Fixed points of quantum operations*, **J. Mathematical Physics, 43** (2002), pag. 5872–5881.

14. Long Long; Zhang Shifang, Fixed points of commutative super-operators, **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 44 Issue: 9** (2011), Article Number: 095201.
Citeaza: A. Arias, A. Gheondea, and S. Gudder , *Fixed points of quantum operations*, **J. Mathematical Physics, 43** (2002), pag. 5872–5881.

15. Liu Yonghui; Tian Yongge, Max-Min Problems on the Ranks and Inertias of the Matrix Expressions A-BXC +/-(BXC)(au) with Applications, **JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS Volume: 148 Issue: 3** (2011), pag. 593–622.
Citeaza: T. Constantinescu and A. Gheondea, *The negative signature of some Hermitian matrices*, **Linear Algebra and its Applications, 178** (1993), 178–42.

16. Liu Yonghui; Tian Yongge, Max-Min Problems on the Ranks and Inertias of the Matrix Expressions A-BXC +/-(BXC)(au) with Applications, **JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS Volume: 148 Issue: 3** (2011), pag. 593–622.
Citeaza: A. Gheondea, *One-step completions of Hermitian partial matrices with minimal negative signature*,**Linear Algebra and its Applications, 173** (1992), 99–114.

Ghergu Marius

1. N.H. Loc, K. Schmitt, Boundary value problems for singular elliptic equations, **Rocky Mountain J. Math. 41** (2011), pag. 555–572.

2. C. Zhai,D.R. Anderson, A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), pag. 388–400. *Citeaza*: M. Ghergu, V. Rădulescu, Sublinear singular elliptic problems with two parameters, **J. Differential Equations 195** (2003), pag. 520–536.

3. M. Magliaro, L. Mari, P. Mastrolia, M. Rigoli, Keller-Osserman type conditions for differential inequalities with gradient terms on the Heisenberg group, **J. Differential Equations 250** (2011), pag. 2643–2670.

4. N. Zeddini, Existence of positive solutions for some nonlinear elliptic systems on the half space, **Electron. J. Differential Equations 12** (2011)

5. R. Filippucci, Nonexistence of nonnegative solutions of elliptic systems of divergence type, **J. Differential Equations 250** (2011), pag. 572–595.

6. R. Precup, Two positive nontrivial solutions for a class of semilinear elliptic variational systems, **J. Math. Anal. Appl. 373** (2011), pag. 138–146. *Citeaza*: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467–475.

7. X. Ren, J. Wei, A toroidal tube solution to a problem involving mean curvature and Newtonian potential, **Interfaces Free Bound. 13** (2011), pag. 127–154. *Citeaza*: M. Ghergu, V. Rădulescu, *A singular Gierer-Meinhardt system with different source terms*, **Proc. Roy. Soc. Edinburgh Sect. A 138** (2008), pag. 1215–1234.

8. Q. Bie, Pattern formation in a general two-cell Brusselator model, **J. Math. Anal. Appl. 376** (2011), 551–564. *Citeaza*: M. Ghergu, *Non-constant steady-state solutions for Brusselator type systems*, **Nonlinearity 21** (2008), pag. 2331–2345.

9. X. Ren, J. Wei, A toroidal tube solution to a problem involving mean curvature and Newtonian potential, **Interfaces Free Bound. 13** (2011), pag. 127–154.

10. H. Maagli, Asymptotic behavior of positive solutions of a semilinear Dirichlet problem, **Nonlinear Anal. 74** (2011), 2941–2947.

11. R. Filippucci, Nonexistence of nonnegative solutions of elliptic systems of divergence type, **J. Differential Equations 250** (2011), pag. 572–595.

12. C. Zhai, D.R. Anderson, A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), 388–400. *Citeaza*: M. Ghergu, V. Rădulescu, Singular elliptic problems: bifurcation and asymptotic analysis. **Oxford Lecture Series in Mathematics and its Applications**, 37. The Clarendon Press, Oxford University Press, Oxford, 2008. xvi+298 pp. ISBN: 978-0-19-533472-2

13. M. Magliaro, L. Mari, P. Mastrolia, M. Rigoli, Keller-Osserman type conditions for differential inequalities with gradient terms on the Heisenberg group, **J. Differential Equations 250** (2011), pag. 2643–2670.

14. A. Hamydy, M. Massar, N. Tsouli, Existence of blow-up solutions for a non-linear equation with gradient term in $\mathbb{R}^N$, **J. Math. Anal. Appl. 377** (2011), pag. 161–169. *Citeaza*: M. Ghergu, C. Niculescu, V. Rădulescu, *Explosive solutions of elliptic equations with absorption and non-linear gradient term*, **Proc. Indian Acad. Sci. Math. Sci. 112** (2002), pag. 441–451

Gologan Radu

1. Boca, Florin P.(1-IL) Distribution of the linear flow length in a honeycomb in the small-scatterer limit. New York J. Math. 16 (2010), 651735.
Citeaza: *Boca, Florin P.(1-IL); Gologan, Radu N.(R-AOS) On the distribution of the free path length of the linear flow in a honeycomb* **Ann. Inst. Fourier (Grenoble)** 59 (2009) 1043-1075

2. Badziahin, Dmitry A.; Haynes, Alan K. A note on Farey fractions with denominators in arithmetic progressions. Acta Arith. 147 (2011), no. 3, 205215. *Citeaza*: *Boca, Florin P.; Gologan, Radu N.; Zaharescu, Alexandru On the index of Farey sequences* **Q. J. Math. 53 (2002)**, no. 4, 377391.

Ignat Liviu

1. Ferreira Raul, Quenching phenomena for a non-local diffusion equation with a singular absorption, **ISRAEL JOURNAL OF MATHEMATICS 184** (2011), no. 1, 387-402
Citeaza: Ignat, Liviu I.; Rossi, Julio D., *Decay estimates for nonlocal problems via energy methods.*, **J. Math. Pures Appl. (9) 92** (2009), no. 2, pag. 163187

2. Marica, Aurora; Zuazua, Enrique, High frequency wave packets for the Schrdinger equation and its numerical approximations., **C. R. Math. Acad. Sci. Paris 349** (2011), no. 1-2, pag. 105–110
Citeaza: Ignat, Liviu I.; Zuazua, *Numerical dispersive schemes for the nonlinear Schrödinger equation* , **SIAM J. Numer. Anal. 47** (2009), no.2, pag. 1366– 1390

3. Terra, Joana; Wolanski, Noemi, LARGE TIME BEHAVIOR FOR A NONLOCAL DIFFUSION EQUATION WITH ABSORPTION AND BOUNDED INITIAL DATA, **DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS 31** (2011), no. 2, pag. 581-605
Citeaza: Ignat, Liviu I.(R-AOS); Rossi, Julio D.(RA-UBAS), *Refined asymptotic expansions for nonlocal diffusion equations.*, **J. Evol. Equ. 8** (2008), no. 4, pag. 617629

4. Terra, Joana; Wolanski, Noemi, Asymptotic behavior for a nonlocal diffusion equation with absorption and nonintegrable initial data. The supercritical case., **Proc. Amer. Math. Soc. 139** (2011),no. 4, pag. 14211432
Citeaza: Ignat, Liviu I.(R-AOS); Rossi, Julio D.(RA-UBAS), *Refined asymptotic expansions for nonlocal diffusion equations.*, **J. Evol. Equ. 8** (2008), no. 4, pag. 617629

5. Sun Yu-Juan; Li Wan-Tong; Wang Zhi-Cheng, Entire solutions in nonlocal dispersal equations with bistable nonlinearity, **JOURNAL OF DIFFERENTIAL EQUATIONS 251** (2011), no. 3, pag. 551-581
Citeaza: Ignat, Liviu I.; Rossi, Julio D., *A nonlocal convection-diffusion equation.*, **J. Funct. Anal. 251** (2007), no. 2, pag. 399–437

6. Ervedoza, Sylvain, Spectral conditions for admissibility and observability of Schrdinger systems: applications to finite element discretizations. , **Asymptot. Anal. 71** (2011), no. 1-2, 1–32,
Citeaza: Ignat, Liviu I.; Zuazua, Enrique, *A two-grid approximation scheme for nonlinear Schrdinger equations: dispersive properties and convergence*, **C. R. Math. Acad. Sci. Paris 341** (2005), no. 6, pag. 381–386

7. Ervedoza, Sylvain, Spectral conditions for admissibility and observability of Schrdinger systems: applications to finite element discretizations. , **Asymptot. Anal. 71** (2011), no. 1-2, 1–32,
Citeaza: Ignat, Liviu I.; Zuazua, Enrique, *Dispersive properties of a viscous numerical scheme for the Schrodinger equation*, **C. R. Math. Acad. Sci. Paris 340** (2005), no. 7, pag. 529–534

Ionescu-Kruse Delia

1. Guan C., Yin Z., *Global weak solutions for a two-component Camassa-Holm shallow water system*, **Journal of Functional Analysis 260** (2011), pag. 1132–1154.
Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007), pag. 303-312.

2. Tan W., Yin Z., *Global periodic conservative solutions of a periodic modified two-component Camassa-Holm equation*, **Journal of Functional Analysis 261** (2011), pag. 1204–1226.
Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007) pag. 303-312.

3. Lv G., Wang Z., *Some remarks for a modified periodic Camassa-Holm system*, **Discrete and Continuous Dynamical Systems (DCDS-A) 30** (2011), pag. 1161 – 1180.
Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007) pag. 303-312.

4. Hu Q., *Global existence and blow-up phenomena for a weakly dissipative periodic 2-component Camassa-Holm system*, **Journal of Mathematical Physics 52** (2011), art. no. 103701.
Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007), pag. 303-312.

5. Tan W., Yin Z., *Global dissipative solutions of a modified two-component Camassa-Holm shallow water system*, **Journal of Mathematical Physics 52** (2011), art. no. 033507.
Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007), pag. 303-312.

6. Chen R.M., Liu Y., *Wave breaking and global existence for a generalized two-component Camassa-Holm system*, **International Mathematics Research Notices 6** (2011), pag. 1381–1416.
   Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007), pag. 303-312.

7. Cai Y., Gao H., *On the persistence of decay properties for the b-family of equations*, **Advanced Nonlinear Studies 11** (2011), pag. 633–651.
   Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007) pag. 303-312.

8. Zong X., Cheng X., Wang Z., Han Z., *Initial Boundary Value Problem and Asymptotic Stabilization of the Two-Component Camassa-Holm Equation*, **Abstract and Applied Analysis 2011** (2011), art. ID 635851.
   Citeaza: Ionescu-Kruse D., *Variational derivation of the Camassa-Holm shallow water equation*, **Journal of Nonlinear Mathematical Physics 14** (2007) pag. 303-312.

9. Hsu H.-C., Ng C.-O., Hwung H.-H., *A New Lagrangian Asymptotic Solution for GravityCapillary Waves in Water of Finite Depth*, **Journal of Mathematical Fluid Mechanics** Doi: 10.1007/s00021-010-0045-7, pag. 1–16.
   Citeaza:

   (a) Ionescu-Kruse D., *Particle trajectories in linearized irrotational shallow water flows*, **Journal of Nonlinear Mathematical Physics, 15** (2008), pag. 13–26.

   (b) Ionescu-Kruse D., *Particle trajectories beneath small amplitude shallow water waves in constant vorticity flows* , **Nonlinear Analysis: Theory, Methods & Applications, 71** (2009), pag. 3779–3793.

10. Ehrnstrm M., Escher J., Villari G., *Steady Water Waves with Multiple Critical Layers: Interior Dynamics*, **Journal of Mathematical Fluid Mechanics** DOI: 10.1007/s00021-011-0068-8, pag. 1–13.
    Citeaza:

    (a) Ionescu-Kruse D., *Particle trajectories in linearized irrotational shallow water flows*, **Journal of Nonlinear Mathematical Physics, 15** (2008), pag. 13–26.

    (b) Ionescu-Kruse D., *Particle trajectories beneath small amplitude shallow water waves in constant vorticity flows* , **Nonlinear Analysis: Theory, Methods & Applications, 71** (2009), pag. 3779–3793.

11. Pochai N., *A Numerical Treatment of Non-dimensional Form of Water Quality Model in a Nonuniform Flow Stream Using Saulyev Scheme*, **Mathematical Problems in Engineering** (2011) , art. ID 491317, pag. 1–15.
    Citeaza: Ionescu-Kruse D., *Particle trajectories beneath small amplitude shallow water waves in constant vorticity flows* , **Nonlinear Analysis: Theory, Methods & Applications, 71** (2009), pag. 3779–3793.

12. Liu S.-X., Liu C., Guo Y.-X., *Geometric formulations and variational integrators of discrete autonomous Birkhoff systems*, **Chinese Physics B 20** (2011), art. no. 034501.
    Citeaza: Ionescu D., *A geometric birkhoffian formalism for nonlinear RLC networks*, **Journal of Geometry and Physics 56** (2006), pag. 2545–2572.

Ionescu Paltin

1. J. Sierra, A remark on Zak's theorem on tangencies, **Math. Res. Letters 18** (2011), pag. 783–789
   Citeaza: P. Ionescu, M. Toma, *Boundedness for some special families of embedded manifolds*, **Contemporary Math. 162** (1994), pag. 215–225 *Citeaza*: P. Ionescu, F. Russo *Manifolds covered by lines, defective manifolds and a restricted Hartshorne Conjecture* **arXiv:0909.2763**

2. C. Ciliberto, F. Flamini, On the branch curve of a general projection of a surface to a plane, **Trans. AMS 363** (2011), pag. 3457–3471
   Citeaza: P. Ionescu, *Generalized adjunction and applications*, **Math. Proc. Cambridge Phil. Soc. 99** (1986), pag. 457–472

3. C. Novelli, G. Occhetta, Projective manifolds containing a large linear subspace with nef normal bundle, **Michigan Math. J. 60** (2011), pag. 441–462
   Citeaza: P. Ionescu, *Generalized adjunction and applications*, **Math. Proc. Cambridge Phil. Soc. 99** (1986), pag. 457–472 *Citeaza*: M. Beltrametti, P. Ionescu, *On manifolds swept out by high dimensional quadrics*, **Math. Zeit. 260** (2008), pag. 229–236

4. L. Bonavero, A. Hoering, Algebraic foliations defined by quasi-lines, **Int. J. Math. 22** (2011), pag. 1501–1528
   Citeaza: P. Ionescu, C. Voica, *Models of rationally connected manifolds*, **J. Math. Soc. Japan 55** (2003), pag. 143–164 *Citeaza*: P. Ionescu, D. Naie, *Rationality properties of manifolds containing quasi-lines*, **Int. J. Math. 14** (2003), pag. 1–28 *Citeaza*: L. Badescu, M. Beltrametti, P. Ionescu, *Almost-lines and quasi-lines on projective manifolds*, **Complex Geometry, Proc. Bayreuth 1998, de Gruyter** (2000), pag. 1–27 *Citeaza*: P. Ionescu, F. Russo, *Conic-connected manifolds*, **J. reine angew. math. 644** (2010), pag. 145–158

5. C. Ciliberto, F. Russo, On the classification of OADP varieties, **Science China Math. 54** (2011), pag. 1561–1575
   Citeaza: P. Ionescu, F. Russo, *Varieties with quadratic entry locus, II*, **Compos. Math. 144** (2008), pag. 949–962

Leustean Laurentiu

1. C. Chiriţă, Tense theta-Valued Lukasiewicz-Moisil Algebras, **Journal of Multiple-Valued Logic and Soft Computing 17** (2011), 1-24
   Citeaza: L. Leuştean, *Canonical models and filtrations in three-valued propositional modal logic*, **Journal of Multiple-Valued Logic 8** (2002), 577–590.

2. Y. J. Cho, L. Ciric, S. H. Wang, Convergence theorems for nonexpansive semigroups in CAT(0) spaces, **Nonlinear Analysis - Theory, Methods & Applications 74** (2011), 6050–6059
   Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

3. A. Cuntavepanit, B. Panyanak, Strong Convergence of Modified Halpern Iterations in CAT(0) Spaces, **Fixed Point Theory and Applications 2011** (2011), Article ID

869458, 11 pages
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

4. A. Dvurecenskij, T. Kowalski, On decomposition of pseudo BL-algebras, **Mathematica Slovaca 61** (2011), 307–326
Citeaza: G. Georgescu, L. Leuştean, V. Preoteasa, *Pseudo-hoops*, **Journal of Multiple-Valued Logic and Soft Computing 11** (2005), 153–184.

5. R. Espínola, A. Fernández-León, On best proximity points in metric and Banach spaces, **Canadian Journal of Mathematics 63** (2011), 533–550
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

6. R. Espínola, P. Lorenzo, A. Nicolae, Fixed points, selections and common fixed points for nonexpansive-type mappings, **Journal of Mathematical Analysis and Applications 382** (2011), pag. 503–515
Citeaza: U. Kohlenbach, L. Leuştean, *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces*, **Journal of the European Mathematical Society 12 (2010)**, 71–92.

7. R. Espínola, A. Nicolae, Geodesic Ptolemy spaces and fixed points, **Nonlinear Analysis - Theory, Methods & Applications 74** (2011), 27–34
Citeaza: U. Kohlenbach, L. Leuştean, *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces*, **Journal of the European Mathematical Society 12 (2010)**, 71–92.

8. N. Fang, P. Srinivasa Pai, S. Mosquea, A comparative study of sharp and round-edge tools in machining with built-up edge formation: cutting forces, cutting vibrations, and neural network modeling, **International Journal of Advanced Manufacturing Technology 53** (2011), 899–910
Citeaza: L. Leuştean, *Liquid flow time series prediction using feed-forward neural networks and Rprop learning algorithm*, **Studies in Informatics and Control 10** (2001), 287–299.

9. H. Fukhar-ud-din, A.A. Domlo, A.R. Khan, Strong Convergence of an Implicit Algorithm in CAT(0) Spaces, **Fixed Point Theory and Applications 2011** (2011), Article ID 173621, 11 pages
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

10. M.A. Khamsi, A.R. Khan, Inequalities in metric spaces with applications, **Nonlinear Analysis: Theory, Methods & Applications 74** (2011), 4036–4045
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

11. A.R. Khan, M.A. Khamsi, H. Fukhar-Ud-Din, Strong convergence of a general iteration scheme in CAT(0) spaces, **Nonlinear Analysis, Theory, Methods & Applications, 74** (2011), 783–791

Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

12. U. Kohlenbach, On quantitative versions of theorems due to F. E. Browder and R. Wittmann, **Advances in Mathematics 226** (2011), 2764–2795
Citeaza:

    (a) L. Leuştean, *Rates of asymptotic regularity for Halpern iterations of nonexpansive mappings*, **Journal of Universal Computer Science 13** (2007), 1680–1691.

    (b) L. Leuştean, *Proof mining in $\mathbb{R}$-trees and hyperbolic spaces*, **Electronic Notes in Theoretical Computer Science 165** (2006), 95-106.

13. W. Laowang, B. Panyanak, Common fixed points for some generalized multivalued nonexpansive mappings in uniformly convex metric spaces, **Fixed Point Theory and Applications 2011** (2011):20, doi:10.1186/1687-1812-2011-20
Citeaza: U. Kohlenbach, L. Leuştean, *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces*, **Journal of the European Mathematical Society 12 (2010)**, 71–92.

14. L.J. Lin, C.S. Chuang, Z.T. Yu, Fixed point theorems and Δ-convergence theorems for generalized hybrid mappings on CAT(0) spaces, **Fixed Point Theory and Applications 2011** (2011):49, doi:10.1186/1687-1812-2011-49
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

15. L.Z. Liu, States on finite monoidal t-norm based algebras, **Information Sciences 181** (2011), 1369–1383
Citeaza: G. Georgescu, L. Leuştean, *Some classes of pseudo-BL algebras*, **Journal of Australian Mathematical Society 73** (2002), 127–153.

16. L.Z. Liu, X.Y. Zhang, States on finite linearly ordered IMTL-algebras, **Soft Computing 15** (2011), 2021–2028
Citeaza: G. Georgescu, L. Leuştean, *Some classes of pseudo-BL algebras*, **Journal of Australian Mathematical Society 73** (2002), 127–153.

17. S. Motamed, A. Borumand Saeid, n-Fold obstinate filters in BL-algebras, **Neural Computing & Applications 20** (2011), 461–472
Citeaza: A. Di Nola, L. Leuştean, *Compact representations of BL-algebras*, **Archive for Mathematical Logic 42** (2003), 737–761.

18. S. Motamed, L. Torkzadeh, A. Borumand Saeid, N. Mohtashamnia, Radical of filters in BL-algebras, **Mathematical Logic Quarterly 57** (2011), 166–179
Citeaza: A. Di Nola, L. Leuştean, *Compact representations of BL-algebras*, **Archive for Mathematical Logic 42** (2003), 737–761.

19. B. Panyanak, A. Cuntavepanit, A Generalization of Suzuki's Lemma, **Abstract and Applied Analysis 2011** (2011), Article ID 824718, 14 pages
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

20. W. Phuengrattan, S. Suantai, Strong Convergence Theorems for a Countable Family of Nonexpansive Mappings in Convex Metric Spaces, **Abstract and Applied Analysis 2011** (2011), Article ID 929037, 18 pages
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

21. J. Zhang, Y. Cui, Existence and convergence of fixed points for mappings of asymptotically nonexpansive type in uniformly convex W-hyperbolic spaces, **Fixed Point Theory and Applications 2011** (2011):39, doi:10.1186/1687-1812-2011-39
Citeaza:

    (a) U. Kohlenbach, L. Leuştean, *Asymptotically nonexpansive mappings in uniformly convex hyperbolic spaces*, **Journal of the European Mathematical Society 12 (2010)**, 71–92.

    (b) L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

Maxim Laurentiu

1. Thi Anh Thu Dinh, Characteristic varieties for a class of line arrangements, **Canad. Math. Bull. 54** (2011), pag. 56–67
Citeaza: A. Dimca, L. Maxim, *Multivariable Alexander invariants of hypersurface complements*, **Trans. Amer. Math. Soc. 359** (2007), no. 7, pag. 3505–3528.

2. Alan Stapledon, Representations on the cohomology of hypersurfaces and mirror symmetry, **Adv. Math. 226** (2011), pag. 5268–5297
Citeaza: S. Cappell, L. Maxim, J. Shaneson, *Equivariant genera of complex algebraic varieties*, **Int. Math. Res. Not. IMRN 2009** (2009), no. 11, 2013–2037.

Mihailescu Eugen

1. N. Akroune, On the fractal dimension of a nowhere differentiable basin boundary, **Bulletin Math. Soc. Sci. Math. Roumanie 54(102)** (2011), 313.
Citeaza: E. Mihailescu, *Unstable manifolds and Holder structures associated with noninvertible maps*, **Discrete and Continuous Dynamical Systems 14** (2006), pag. 419 – 446. *Citeaza*: E. Mihailescu, *Metric properties of some fractal sets and applications of inverse pressure*, **Math. Proceed. Cambridge 148** (2010), pag. 553 – 572. *Citeaza*: E. Mihailescu, M. Urbanski, *Estimates for the stable dimension for holomorphic maps*, **Houston J. Math. 31** (2005), pag. 367 – 389.

2. E. Mihailescu, Local geometry and dynamical behavior on folded basic sets, **Journal of Statistical Physics 142** (2011), pag. 154–167
Citeaza: E. Mihailescu, *Unstable manifolds and Holder structures associated to noninvertible maps*, **Discrete and Continuous Dynamical Systems 14** (2006), pag. 419-446 *Citeaza*: E. Mihailescu, *Unstable directions and fractal dimension for skew products with overlaps in fibers*, **Mathematische Zeitschrift** (2011), DOI: 10.1007/s00209-010-0761-y *Citeaza*: E. Mihailescu, *Metric properties of some fractal sets and applications of inverse pressure*, **Mathematical Proceedings of Cambridge Philosophical Society 148**, (2010), pag. 553-572. *Citeaza*: E. Mihailescu and M. Urbanski, *Estimates for the*

stable dimension for holomorphic maps, **Houston Journal of Mathematics 31** (2005), pag. 367-389. *Citeaza*: E. Mihailescu and M. Urbanski, *Inverse pressure estimates and independence of stable dimension for non-invertible maps*, **Canadian Journal of Mathematics 60** (2008), 658-684. *Citeaza*: E. Mihailescu and M. Urbanski, *Relations between stable dimension and preimage counting function on basic sets with overlaps*, **Bulletin of the London Mathematical Society 42** (2010), 15-27.

3. E. Mihailescu, Asymptotic distributions of preimages for endomorphisms, **Ergodic Theory and Dynamical Systems 31** (2011), 911-934.
   Citeaza: E. Mihailescu, *Unstable manifolds and Holder structures associated to non-invertible maps*, **Discrete and Continuous Dynamical Systems 14** (2006), pag. 419-446 *Citeaza*: E. Mihailescu and M. Urbanski, *Estimates for the stable dimension for holomorphic maps*, **Houston Journal of Mathematics 31** (2005), pag. 367-389. *Citeaza*: E. Mihailescu and M. Urbanski, *Inverse pressure estimates and independence of stable dimension for non-invertible maps*, **Canadian Journal of Mathematics 60** (2008), 658-684. *Citeaza*: E. Mihailescu, *The set K^- for hyperbolic non-invertible maps*, **Ergodic Theory and Dynamical Systems 22** (2002), 873-887. *Citeaza*: E. Mihailescu and M. Urbanski, *Inverse topological pressure with applications to holomorphic dynamics of several complex variables*, **Communications in Contemporary Mathematics 6**, (2004), 653-682.

4. E. Mihailescu and M. Urbanski, Hausdorff dimension of the limit set of conformal iterated function systems with overlaps, **Proceedings of the American Mathematical Society 139** (2011), pag. 2767-2775
   Citeaza: E. Mihailescu, *Unstable directions and fractal dimension for skew products with overlaps in fibers*, **Mathematische Zeitschrift online** (2011), pag. ¡... – ...¿ *Citeaza*: E. Mihailescu and M. Urbanski, *Inverse pressure estimates and the independence of stable dimension for non-invertible maps*, **Canadian Journal of Mathematics 60** (2008), pag. 658-684. *Citeaza*: E. Mihailescu and M. Urbanski, *Estimates for the stable dimension for holomorphic maps*, **Houston Journal of Mathematics 31** (2005), pag. 367-389.

5. E. Mihailescu, On a class of stable conditional measures, **Ergodic Theory and Dynamical Systems 31**, (2011), 1499-1515.
   Citeaza: E. Mihailescu, *Unstable manifolds and Holder structures associated to non-invertible maps*, **Discrete and Continuous Dynamical Systems 14** (2006), pag. 419-446 *Citeaza*: E. Mihailescu, *Metric properties of some fractal sets and applications of inverse pressure*, **Mathematical Proceedings of Cambridge Philosophical Society 148**, (2010), pag. 553-572. *Citeaza*: E. Mihailescu and M. Urbanski, *Inverse pressure estimates and independence of stable dimension for non-invertible maps*, **Canadian Journal of Mathematics 60** (2008), 658-684. *Citeaza*: E. Mihailescu and M. Urbanski, *Transversal families of hyperbolic skew products*, **Discrete and Continuous Dynamical Systems 21**, (2008), 907-928.

6. E. Mihailescu, On some coding and mixing properties for a class of chaotic systems, **Monatshefte fuer Mathematik** (2011), DOI 10.1007/s00605-011-0347-8
   Citeaza: E. Mihailescu, *Unstable directions and fractal dimension for skew products with overlaps in fibers*, **Mathematische Zeitschrift** (2011), DOI: 10.1007/s00209-010-0761-y
   Citeaza: E. Mihailescu and M. Urbanski, *Relations between stable dimension and preimage*

counting function on basic sets with overlaps, **Bulletin of the London Mathematical Society 42** (2010), 15-27. *Citeaza*: E. Mihailescu, *Metric properties of some fractal sets and applications of inverse pressure*, **Mathematical Proceedings of Cambridge Philosophical Society 148**, (2010), pag. 553-572. *Citeaza*: E. Mihailescu, *Unstable manifolds and Holder structures associated to non-invertible maps*, **Discrete and Continuous Dynamical Systems 14** (2006), pag. 419-446 *Citeaza*: E. Mihailescu and M. Urbanski, *Transversal families of hyperbolic skew products*, **Discrete and Continuous Dynamical Systems 21**, (2008), 907-928.

7. E. Mihailescu, Approximations for Gibbs states of arbitrary Holder potentials on hyperbolic folded sets, **Discrete and Continuous Dynamical Systems 32**, (2012), 961-975. *Citeaza*: E. Mihailescu, *Unstable directions and fractal dimension for skew products with overlaps in fibers*, **Mathematische Zeitschrift** (2011), DOI: 10.1007/s00209-010-0761-y *Citeaza*: E. Mihailescu, *Metric properties of some fractal sets and applications of inverse pressure*, **Mathematical Proceedings of Cambridge Philosophical Society 148**, (2010), pag. 553-572. *Citeaza*: E. Mihailescu and M. Urbanski, *Transversal families of hyperbolic skew products*, **Discrete and Continuous Dynamical Systems 21**, (2008), 907-928. *Citeaza*: E. Mihailescu, *On a class of stable conditional measures*, **Ergodic Theory and Dynamical Systems 31**, (2011), 1499-1515. *Citeaza*: E. Mihailescu *The set K^- for hyperbolic non-invertible maps*, **Ergodic Theory and Dynamical Systems 22** (2002), 873-887.

Moroianu Sergiu

1. Morame Abderemane si Truc Francoise, Eigenvalues of Laplacian with Constant Magnetic Field on Non-Compact Hyperbolic Surfaces with Finite Area, **Letters in Mathematical Physics 97** (2011), Issue: 2, Pages: 203–211,
Citeaza: Sylvain Golenia si Sergiu Moroianu, *Spectral analysis of magnetic Laplacians on conformally cusp manifolds* , **Annales Henri Poincare 9**, Issue: 1 (2008), pag. 131–179.

2. Battisti Ubertino si Coriasco Sandro, Wodzicki residue for operators on manifolds with cylindrical ends, **Ann. Global Analysis Geom. 40** (2011), pag. 223–249,
Citeaza: Sergiu Moroianu, *Weyl laws on open manifolds* , **Mathematische Annalen 340** (2008), pag. 1–21.

3. Ovidiu Tintareanu-Mircea, f-Symbols, Killing tensors and conserved Bell-type currents, **Modern Physics Letters A 26** (2011), pag. 337–349,
Citeaza: Cotaescu II; Moroianu S; Visinescu M, *Quantum anomalies for generalized Euclidean Taub-NUT metrics* , **Journal Phys A: Math Gen 38** (2005), pag. 7005–7019

4. Mihai Visinescu, Covariant Approach of the Dynamics of Particles in External Gauge Fields, Killing Tensors and Quantum Gravitational Anomalies, **Symmetry Integrability and Geometry–Methods Applic. 7** (2011), DOI 10.3842/SIGMA.2011.037.
Citeaza: Andrei Moroianu si Sergiu Moroianu, *The Dirac operator on generalized Taub-NUT spaces*, **Commun. Math. Phys. 305** (2011), pag. 641–656.
Citeaza: Sergiu Moroianu si Mihai Visinescu, *Finiteness of the L-2-index of the Dirac operator of generalized Euclidean Taub-NUT metrics* , **Journal Phys A: Math Gen 39** (2006), pag. 6575-6581.

Nenciu Irina

1. Maxim Derevyagin, Luc Vinet, Alexei Zhedanov, CMV matrices and little and big -1 Jacobi polynomials, preprint, arXiv:1108.3535v2 (2011)
   Citeaza: R. Killip, I. Nenciu, *Matrix models for beta ensembles*, **Int. Math. Res. Not. 50** (2004), pag. 2665– 2701.

2. Golinskii, L.; Kheifets, A.; Peherstorfer, F.; Yuditskii, P., Scattering theory for CMV matrices: uniqueness, Helson-Szegö and strong Szegö theorems, **Integral Equations Operator Theory 69** (2011), 479–508
   Citeaza: R. Killip, I. Nenciu, *Matrix models for beta ensembles*, **Int. Math. Res. Not. 50** (2004), pag. 2665– 2701.

3. Colin de Verdire, Yves, Torki-Hamza, Nabila, Truc, Franoise, Essential self-adjointness for combinatorial Schrdinger operators IImetrically non complete graphs, **Math. Phys. Anal. Geom. 14** (2011), 21–38
   Citeaza: Nenciu, Gheorghe, Nenciu, Irina, *On confining potentials and essential self-adjointness for Schrödinger operators on bounded domains in* $\mathbb{R}^n$, **Ann. Henri Poincaré 10** (2009), 377–394.

4. Patrick Desrosiers, Dang-Zheng Liu, Selberg Integrals, Super hypergeometric functions and Applications to β-Ensembles of Random Matrices , preprint, arXiv:1109.4659v1
   Citeaza: R. Killip, I. Nenciu, *Matrix models for beta ensembles*, **Int. Math. Res. Not. 50** (2004), pag. 2665– 2701.

Nenciu Gheorghe

1. Bouclet J-M, Low Frequency Estimates for Long Range Perturbations in Divergence Form , **CANADIAN JOURNAL OF MATHEMATICS-JOURNAL CANADIEN DE MATHEMATIQUES 63** (2011), 961-991
   Citeaza: A. Jensen, G. Nenciu , *A unified approach to resolvent expansions at thresholds*, **REVIEWS IN MATHEMATICAL PHYSICS, 13** (2001) , 717-754.

2. Moldoveanu V,, Cornean H. D., Pillet C-A., Nonequilibrium steady states for interacting open systems: Exact results, **PHYSICAL REVIEW B 84** (2011), Article Number: 075464
   Citeaza: G. Nenciu, *Independent electron model for open quantum systems: Landauer-Buttiker formula and strict positivity of the entropy production*, **JOURNAL OF MATHEMATICAL PHYSICS, 48 (2007)**, 033302.

3. Cacciapuoti C., Carlone R., Figari R., Perturbations of eigenvalues embedded at threshold: Two-dimensional solvable models, **JOURNAL OF MATHEMATICAL PHYSICS 52** (2011), Article Number: 083515
   Citeaza: A. Jensen, G. Nenciu, *Nonexponential decay laws in perturbation theory of near threshold eigenvalues* , **JOURNAL OF MATHEMATICAL PHYSICS 50** (2009), Article Number: 013516.

4. Cacciapuoti C., Carlone R., Figari R., Perturbations of eigenvalues embedded at threshold: Two-dimensional solvable models, **JOURNAL OF MATHEMATICAL PHYSICS 52** (2011), Article Number: 083515

Citeaza: A. Jensen, G. Nenciu, *The Fermi Golden Rule and its form at thresholds in odd dimensions* , **COMMUNICATIONS IN MATHEMATICAL PHYSICS 261** (2006), 693-727.

5. Cacciapuoti C., Carlone R., Figari R., Perturbations of eigenvalues embedded at threshold: Two-dimensional solvable models, **JOURNAL OF MATHEMATICAL PHYSICS 52** (2011), Article Number: 083515
Citeaza: A. Jensen, G. Nenciu, *Exponential Decay Laws in Perturbation Theory of Threshold and Embedded Eigenvalues* , **Conference: 15th International Congress on Mathematical Physics Location: Rio de Janeiro, BRAZIL Date: AUG 05-11, 2006 Source: NEW TRENDS IN MATHEMATICAL PHYSICS** (2009), 525-538.

6. Cacciapuoti C., Carlone R., Figari R., Perturbations of eigenvalues embedded at threshold: Two-dimensional solvable models, **JOURNAL OF MATHEMATICAL PHYSICS 52** (2011), Article Number: 083515
Citeaza: A. Jensen, G. Nenciu , *A unified approach to resolvent expansions at thresholds*, **REVIEWS IN MATHEMATICAL PHYSICS, 13** (2001) , 717-754.

7. Finster F., A Formulation of Quantum Field Theory Realizing a Sea of Interacting Dirac Particles, **LETTERS IN MATHEMATICAL PHYSICS 97** (2011), 165-183
Citeaza: G. Nenciu , G. Scharf, *Regular external field in Quantum Electrodynamics*, **HELVETICA PHYSICA ACTA 51** (1978), 412-424.

8. Avron J. E.; Fraas M.; Graf G. M.; et al., Landau-Zener Tunneling for Dephasing Lindblad Evolutions, **COMMUNICATIONS IN MATHEMATICAL PHYSICS 305** (2011), 633-639
Citeaza: G. Nenciu , G. Rasche, *On the adiabatic theorem for non self-adjoint operators*, **JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 25** (1992), 5741-5751.

9. Cornean H., D., Moldoveanu V., On the cotunneling regime of interacting quantum dots, **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 44** (2011), Article Number: 305002
Citeaza: Cornean H. D.; Duclos P.; Nenciu G.; et al., *Adiabatically switched-on electrical bias and the Landauer-Buttiker formula*, **JOURNAL OF MATHEMATICAL PHYSICS 49** (2008), Article Number:102106 .

10. Ringel Z., Kraus Y. E., Determining topological order from a local ground-state correlation function , **PHYSICAL REVIEW B 83** (2011), Article Number: 245115
Citeaza: Cornean H. D.; Nenciu A. Nenciu G., *Optimally localized Wannier functions for quasi one-dimensional nonperiodic insulators*, **JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 41** (2008), Article Number:125202 .

11. Prodan E., Manifestly gauge-independent formulations of the Z(2) invariants , **PHYSICAL REVIEW B 83** (2011), Article Number: 235115
Citeaza: Nenciu G., *Adiabatic theorem and spectral concentration. 1. Arbitrary order concentration for the Stark effect in atomic physics*, **COMMUNICATIONS IN MATHEMATICAL PHYSICS 82** (2008), 121-135 .

12. Kopylova E. A., Weighted energy decay for 1D Dirac equation , **DYNAMICS OF PARTIAL DIFFERENTIAL EQUATIONS 8** (2011), 113-125
Citeaza: A. Jensen, G. Nenciu , *A unified approach to resolvent expansions at thresholds*, **REVIEWS IN MATHEMATICAL PHYSICS, 13** (2001) , 717-754.

13. Cheng B. H., Lan Y-C., Bloch Oscillations of Surface Plasmon-Like Modes in Waveguide Arrays That Comprise Perforated Perfect Conductor Layers and Dielectric Layers , **PLASMONICS 6** (2011), 427-433
Citeaza: G. Nenciu, *Dynamics of band electrons in electric and magnetic fields: Rigorous justification of the effective hamiltonians*, **Rev. Mod. Phys, 63** (1991),91-128.

14. Bentosela F., Cornean, D., Fleury B. H., On the transfer matrix of a MIMO system, **MATHEMATICAL METHODS IN THE APPLIED SCIENCES 34** (2011), 963-976
Citeaza: Cornean H.D., Nenciu G., *Two dimensional magnetic Schrodinger operators: Width of mini bands in the tight binding approximation*, **ANNALES HENRI POINCARE Volume: 1**, (2000) 203-222.

15. Bentosela F., Cornean, D., Fleury B. H.,On the transfer matrix of a MIMO system , **MATHEMATICAL METHODS IN THE APPLIED SCIENCES 34** (2011), 963-976
Citeaza:Cornean H.D., Nenciu G., *The Faraday effect revisited: Thermodynamic limit*, **JOURNAL OF FUNCTIONAL ANALYSIS 257** , (2009) 2024-2066 .

16. Hine N. D. M., Robinson M., Haynes P. D., Accurate ionic forces and geometry optimization in linear-scaling density-functional theory with local orbitals , **PHYSICAL REVIEW B 83** (2011), Article Number: 195102
Citeaza: G. Nenciu, *Existence of the exponentially localised Wannier functions*, **Comm. Math. Phys. 91** (1983) 81–85.

17. Denisov S. A., The generic behavior of solutions to some evolution equations: Asymptotics and Sobolev norms , **DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS 30** (2011), 77-113
Citeaza: G. Nenciu, *Adiabatic theory: stability of systems with increasing gaps*, **ANNALES DE L INSTITUT HENRI POINCARE-PHYSIQUE THEORIQUE 67** (1997) 411-424 .

18. Skibsted E., Wang X. P., Two-body threshold spectral analysis, the critical case , **JOURNAL OF FUNCTIONAL ANALYSIS 260** (2011), 1766-1794
Citeaza: A. Jensen, G. Nenciu , *A unified approach to resolvent expansions at thresholds*, **REVIEWS IN MATHEMATICAL PHYSICS, 13** (2001) , 717-754.

19. Faraj A., Mantile A., Nier F., Adiabatic evolution of 1D resonances: an artificial interface approach , **MATHEMATICAL MODELS AND METHODS IN APPLIED SCIENCES 21** (2011), 541-618
Citeaza: G. Nenciu, *Linear adiabatic theory-exponential estimates*, **Commun. Math. Phys.152** (1993), pag. 479-496.

20. Faraj A., Mantile A., Nier F., Adiabatic evolution of 1D resonances: an artificial interface approach , **MATHEMATICAL MODELS AND METHODS IN APPLIED**

SCIENCES 21 (2011), 541-618
Citeaza: G. Nenciu , G. Rasche, *On the adiabatic theorem for non self-adjoint operators*, **JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 25** (1992), 5741-5751.

21. de Verdiere Yves C., Torki-Hamza N., Truc F., Essential Self-adjointness for Combinatorial Schrodinger Operators II-Metrically non Complete Graphs, **MATHEMATICAL PHYSICS ANALYSIS AND GEOMETRY 14** (2011), 21-38
Citeaza: G. Nenciu , I. Nenciu, *On Confining Potentials and Essential Self-Adjointness for Schrodinger Operators on Bounded Domains in R(n)* , **ANNALES HENRI POINCARE 10** (2009), 377-394.

22. Kopylova E. A.; Komech A. I. , On Asymptotic Stability of Moving Kink for Relativistic Ginzburg-Landau Equation critical , **COMMUNICATIONS IN MATHEMATICAL PHYSICS 302** (2011), 225-252
Citeaza: A. Jensen, G. Nenciu , *A unified approach to resolvent expansions at thresholds*, **REVIEWS IN MATHEMATICAL PHYSICS, 13** (2001) , 717-754.

23. Weinan E., Lu J. , The Electronic Structure of Smoothly Deformed Crystals: Wannier Functions and the Cauchy-Born Rule , **ARCHIVE FOR RATIONAL MECHANICS and Analysis 199** (2011), 407-433
Citeaza: A. Nenciu, G. Nenciu, *The existence of generalised Wannier functions for one-dimensional systems*, **Comm. Math. Phys. 190** (1998) 541-548 .

24. Gesztesy F., Mitrea M. , A description of all self-adjoint extensions of the Laplacian and KreAn-type resolvent formulas on non-smooth domains , **JOURNAL D ANALYSE MATHEMATIQUE 113** (2011), 53-172
Citeaza: G. Nenciu, *Applications of the Krein formula to the theory of self-adjoint extensions of positive symmetric operators*, **JOURNAL OF OPERATOR THEORY 10** (1993), pag. 209-218.

25. Hoefer M. A.; Weinstein M. I. , Defect modes and homogeneization of periodic Schrodinger operators , **SIAM JOURNAL ON MATHEMATICAL ANALYSIS 43** (2011), 971-996 *Citeaza*: G. Nenciu, *Dynamics of band electrons in electric and magnetic fields: Rigorous justification of the effective hamiltonians*,**Rev. Mod. Phys, 63** (1991),91-128.

Nichita Felix Florin

1. Robert Wisbauer, Lifting Theorems for Tensor Functors on Module Categories, **Journal of Algebra and Its Applications, vol. 10, No.1** (2011), pag. 129 – 155
Citeaza: Brzezinski, T., Nichita, F. , *Yang-Baxter systems and entwining structures* , **Comm. Algebra 33** (2005), pag. 1083 – 1093.

2. Robert Wisbauer, Lifting Theorems for Tensor Functors on Module Categories, **Journal of Algebra and Its Applications, vol. 10, No.1** (2011), pag. 129 – 155
Citeaza: Sorin Dascalescu, Florin F. Nichita, *Yang-Baxter Operators Arising from (Co)Algebra Structures*, **Communications in Algebra, Vol. 27 (12)** (1999), pag. 5833-5845.

3. Robert Wisbauer, Lifting Theorems for Tensor Functors on Module Categories, **Journal of Algebra and Its Applications, vol. 10, No.1** (2011), pag. 129 – 155

Citeaza: Florin F. Nichita, *Self-Inverse Yang-Baxter Operators from (Co)Algebra Structures*, **Journal of Algebra 218** (1999), pag. 738-759.

Ornea Liviu

1. P. Gilkey, S. Nikčević, U. Simon, Geometric realizations, curvature decompositions, and Weyl manifolds, **J. Geom. Phys. 261** (2011), pag. 270–275.
   Citeaza: Liviu Ornea, Paolo Piccinni, *Locally conformal Kaehler structures in quaternionic geometry*, **Transactions of the American Mathematical Society, 349** (1997), pag. 641-655.

2. A. Derdzinski, Zeros of conformal fields in any metric signature, **Class. Quant. Grav. 28 075011** (2010), doi:10.1088/0264-9381/28/7/075011.
   Citeaza: F.A. Belgun, A. Moroianu, Liviu Ornea, *Essential points of conformal vector fields*, **Journal of Geometry and Physics 61** (2011), pag. 589–593.

3. E. Scholz, Weyl geometric gravity and electroweak symmetry "breaking", **Annalen der Physik 523** (2011), pag. 507–530.
   Citeaza: ¡Liviu Ornea¿, *Weyl structures on quaternionic manifolds. A state of the art* , **Barletta, Elisabetta (ed.), Selected topics in geometry and mathematical physics. Vol. I. Potenza: Univ. degli Studi della Basilicata, Dipartimento di Matematica, Seminario Interdisciplinare di Matematica** (2001), pag. 43–80.

4. C. van Coevering, Examples of asymptotically conical Ricci-flat Kähler manifolds, **Math. Zeitschrift, 267** (2011), pag. 465–496.
   Citeaza: Liviu Ornea, M. Verbitsky, *Embeddings of compact Sasakian manifolds*, **Mathematical Research Letters, 14** (2007), pag.703–710.

5. J.C. Marrero, D. Martinez Torres, E. Padron, Universal models via embedding and reduction for locally conformal symplectic structures, **Ann. Global Analysis Geom., 40** (2011), pag. 311–337.
   Citeaza: P.Gauduchon, Liviu Ornea, *Locally conformal Kaehler metrics on Hopf surfaces*, **Annales de l'Institut Fourier, 48** (1998), pag. 1107–1127.
   Citeaza: R. Gini, Liviu Ornea, M. Parton, *Locally conformal Kaehler reduction*, **Journal fuer die Reine und Angewandte Mathematik 581** (2005), pag. 1–21.
   Citeaza: Y. Kamishima, Liviu Ornea, *Geometric flow on compact locally conformally Kaehler manifolds*, **Tohoku Math. J. 57** (2005), pag. 201–221.
   Citeaza: Liviu Ornea, M. Verbitsky, *Locally conformally Kähler manifolds admitting a holomorphic conformal flow*, **Math. Zeitschrift, va apărea** (¡an¿)
   Citeaza: Liviu Ornea, M. Verbitsky, *An immersion theorem for Vaisman manifolds* , **Mathematische Annalen 332** (2005), pag. 121–143.
   Citeaza: Liviu Ornea, M. Verbitsky, *Structure theorem for compact Vaisman manifolds*, **Mathematical Research Letters 10** (2003), pag. 799–805.
   Citeaza: Liviu Ornea, M. Verbitsky, *Topology of locally conformally Kähler manifolds*, **Intern. Math. Res. Notices, 4** (2010), pag. 717–726.
   Citeaza: Liviu Ornea, M. Verbitsky, *Morse-Novikov cohomology of locally conformally Kaehler manifolds*, **Journal of Geometry and Physics 59** (2009), pag. 295–305.

6. G. Bande, D. Kotschick, Contact pairs and locally conformally symplectic structures, **Contemporary Mathematics 542** (2011), pag. 85–98.

Citeaza: S. Dragomir, Liviu Ornea, *Locally conformal Kaehler geometry*, **Progress in Mathematics 155, Birkhäuser** (1998).
Citeaza: Liviu Ornea, M. Verbitsky, *A report on locally conformally Kaehler manifolds*, **Contemporary Mathematics 542** (2011), pag. 135–150.
Citeaza: Liviu Ornea, *Locally conformally Kaehler manifolds. A selection of results*, **Lecture Notes of Seminario Interdisciplinare di Matematica, 4** (2005), pag. 121–152.
Citeaza: Liviu Ornea, M. Verbitsky, *Structure theorem for compact Vaisman manifolds*, **Mathematical Research Letters 10** (2003), pag. 799–805.

7. P. Matzeu, Closed Einstein-Weyl structures on compact Sasakian and cosymplectic manifolds, **Proc. Edinburgh Math. Soc. 54** (2011), pag.149–160.
Citeaza: Liviu Ornea, P. Piccinni, *Compact hyperhermitian-Weyl and quaternion Hermitian-Weyl manifolds*, **Annals of Global Analysis and Geometry, 16** (1998), pag. 383–398.

Panaite Florin

1. J. Borges, C. Lomp, Irreducible actions and compressible modules, **J. Algebra Appl. 10(1)** (2011), pag. 101 – 117
Citeaza: D. Bulacu, F. Panaite, F. Van Oystaeyen, *Quasi-Hopf algebra actions and smash products*, **Comm. Algebra 28(2)** (2000), pag. 631 – 651

2. D. Bulacu, A Clifford algebra is a weak Hopf algebra in a suitable symmetric monoidal category, **J. Algebra 332(1)** (2011), pag. 244 – 284
Citeaza: D. Bulacu, S. Caenepeel, F. Panaite, *Yetter-Drinfeld categories for quasi-Hopf algebras*, **Comm. Algebra 34(1)** (2006), pag. 1 – 35

3. D. Calaque, K. Ebrahimi-Fard, D. Manchon, Two interacting Hopf algebras of trees: A Hopf-algebraic approach to composition and substitution of B-series, **Adv. Appl. Math. 47(2)** (2011), pag. 282 – 308
Citeaza: F. Panaite, *Relating the Connes-Kreimer and Grossman-Larson Hopf algebras built on rooted trees*, **Lett. Math. Phys 51(3)** (2000), pag. 211 – 219

4. G. Carnovale, J. Cuadra, On the subgroup structure of the full Brauer group of Sweedler Hopf algebra, **Israel J. Math. 183(1)** (2011), pag. 61 – 92
Citeaza: F. Panaite, F. Van Oystaeyen, *Quasitriangular structures for some pointed Hopf algebras of dimension* 2^n, **Comm. Algebra 27(10)** (1999), pag. 4929 – 4942

5. L. Foissy, Lie algebras associated to systems of Dyson-Schwinger equations, **Adv. Math. 226(6)** (2011), pag. 4702 – 4730
Citeaza: F. Panaite, *Relating the Connes-Kreimer and Grossman-Larson Hopf algebras built on rooted trees*, **Lett. Math. Phys 51(3)** (2000), pag. 211 – 219

6. P. Jara, J. Lopez, G. Navarro, D. Stefan, On the classification of twisting maps between K^n and K^m, **Algebr. Represent. Theory 14(5)** (2011), pag. 869– 895
Citeaza: P. Jara, J. Lopez, F. Panaite, F. Van Oystaeyen, *On iterated twisted tensor products of algebras*, **Internat. J. Math. 19(9)** (2008), pag. 1053 – 1101

7. H. Li, J. Sun, Twisted tensor products of nonlocal vertex algebras, **J. Algebra 345(1)** (2011), pag. 266 – 294
Citeaza: J. Lopez, F. Panaite, F. Van Oystaeyen, *General twisting of algebras*, **Adv. Math. 212(1)** (2007), pag. 315 – 337

8. A. E. Ruuge, F. Van Oystaeyen, Distorsion of the Poisson bracket by noncommutative Planck constants, **Comm. Math. Phys. 304(2)** (2011), pag. 369 – 393
Citeaza: J. Lopez, F. Panaite, F. Van Oystaeyen, *General twisting of algebras*, **Adv. Math. 212(1)** (2007), pag. 315 – 337

9. A. M. Semikhatov, Heisenberg double $H(B^*)$ as a braided commutative Yetter-Drinfeld module algebra over the Drinfeld double, **Comm. Algebra 39(5)** (2011), pag. 1883 – 1906
Citeaza: F. Panaite, *Doubles of (quasi) Hopf algebras and some examples of quantum groupoids and vertex groups related to them*, **Contemporary Math. 441** (2007), pag. 91 – 115

10. T. Yang, S.- H. Wang, Constructing new braided T-categories over regular multiplier Hopf algebras, **Comm. Algebra 39(9)** (2011), pag. 3073 – 3089
Citeaza: F. Panaite, M. D. Staic, *Generalized (anti) Yetter-Drinfeld modules as components of a braided T-category*, **Israel J. Math. 158(1)** (2007), pag. 349 – 366

11. Y. Wang, L.- Y. Zhang, The structure theorem for comodule algebras over Hopf algebroids, **Acta Math. Hungarica 132(1-2)** (2011), pag. 49 – 62
Citeaza: F. Panaite, F. Van Oystaeyen, *A structure theorem for quasi-Hopf comodule algebras*, **Proc. Amer. Math. Soc. 135(6)** (2007), pag. 1669 – 1677

Pantilie Radu

1. P. Baird, J. C. Wood, Harmonic morphisms and bicomplex manifolds, **Journal of Geometry and Physics 61** (2011), pag. 46–61.
Citeaza: R. Pantilie, J. C. Wood, *Twistorial harmonic morphisms with one-dimensional fibres on self-dual four-manifolds*, **Quarterly Journal of Mathematics 57** (2006), pag. 105–132.

2. S. Heller, Harmonic morphisms on conformally flat 3-spheres, **Bulletin of the London Mathematical Society 43** (2011), pag. 137–150.
Citeaza: R. Pantilie, *Harmonic morphisms with one-dimensional fibres on conformally-flat Riemannian manifolds*, **Mathematical Proceedings of the Cambridge Philosophical Society 145** (2008), pag. 141–151.

3. P. Li, K. Liu, Some remarks on circle action on manifolds, **Mathematical Research Letters 18** (2011), pag. 437–446.
Citeaza: R. Pantilie, J. C. Wood, *Topological restrictions for circle actions and harmonic morphisms*, **Manuscripta Mathematica 110** (2003), pag 351–364.

Pasa Gelu

A) Lucrarea: An optimal viscosity profile in enhanced oil recovery by polymer flooding Author(s): Daripa, P (Daripa, P); Pasa, G (Pasa, G) Source: INTERNATIONAL JOURNAL

OF ENGINEERING SCIENCE **42 (19-20**, 2029-2039, DOI: 10.1016/j.ijengsci.2004.07.008, Published: NOV-DEC 2004, Times Cited: 7 (from Web of Science), este citata in:

1) Shadloo, M. S. Application of homotopy perturbation method to find an analytical solution for magnetohydrodynamic flows of viscoelastic fluids in converging/diverging channels, **PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, 2011.**

2) Qiao, Ru. Evaluation of modified cationic starch for impeding polymer channeling and in-depth profile control after polymer flooding. **JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, MAR 25, 2010.**

B) Lucrarea: On the growth rate for three-layer Hele-Shaw flows: Variable and constant viscosity cases Author(s): Daripa P; Pasa G Source: INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE Volume: **43 (11-12)**, 877-884, DOI: 10.1016/j.ijengsci.2005.03.006, Published: JUL 2005, Times Cited: 6 (from Web of Science), este citata in:

1)Daripa, Prabir. On estimates for short wave stability and long wave instability in three-layer Hele-Shaw flows. **PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, SEP 15, 2011.**

2)Booth, R. J. S. Asymptotics for the Muskat problem. **JOURNAL OF ENGINEERING MATHEMATICS, MAR, 2011.**

C) Lucrarea: New bounds for stabilizing Hele-Shaw flows Author(s): Daripa, P (Daripa, P); Pasa, G (Pasa, G) Source: APPLIED MATHEMATICS LETTERS **18 11** , 1293-1303, DOI: 10.1016/j.aml.2005.02.027 Published: NOV 2005, Times Cited: 6 (from Web of Science), este citata in:

1) Booth, R. J. S. Asymptotics for the Muskat problem. **JOURNAL OF ENGINEERING MATHEMATICS, MAR, 2011.**

D) Lucrarea: A simple derivation of an upper bound in the presence of a viscosity gradient in three-layer Hele-Shaw flows Author(s): Daripa, P (Daripa, P); Pasa, G (Pasa, G) Source: JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT, Article Number: P01014, DOI:10.1088/1742-5468/2006/01/P01014, Published: JAN 2006, Times Cited: 5 (from Web of Science), esta citata in:

1) Daripa, Prabir. On estimates for short wave stability and long wave instability in three-layer Hele-Shaw flows. **PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, SEP 15, 2011.**

Paunescu Liviu

1. Gabor Elek; Endre Szabo, Sofic representations of amenable groupsa, **Proc. Amer. Math. Soc. 139** (2011), pag. 4285-4291
   Citeaza: Păunescu, L, *On Sofic Actions and Equivalence Relations*, **Journal of Functional Analysis Volume 261, Issue 9** (2011), pag. 2461 – 2485

Pilca Mihaela Veronica

1. Liviu Ornea, Misha Verbitsky , A report on locally conformally Kaehler manifolds, **Contemporary Mathematics 542** (2011), pag. 135 – 150
   Citeaza: Mihaela Pilca, Liviu Ornea, *Remarks on the Product of Harmonic Forms*, **Pacific Journal of Mathematics 250** (2011), pag. 353 – 363.

Polisevschi Dan

1. P. Donato, K. H. Le Nguyen, R. Tardieu, The periodic unfolding method for a class of imperfect transmission problems , **Journal of Mathematical Sciences 176(6)** (2011), 891–927
   Citeaza: H.I. Ene, D. Poliševki, *Model of diffusion in partially fissured media*, **J. Appl. Math. Phys. (ZAMP), 53(6)** (2002), 1052–1059

2. Atul Kumar Singha, Pratibha Agnihotria, N.P. Singhb, Ajay Kumar Singh, Transient and non-Darcian effects on natural convection flow in a vertical channel partially filled with porous medium: Analysis with Forchheimer-Brinkman extended Darcy model, **International Journal of Heat and Mass Transfer 54(5-6)** (2011), 1111-1120
   Citeaza: H.I. Ene, D. Poliševki, *Thermal Flow in Porous Media*, **D.Reidel Pub.Co., Dordrecht, Holland** (1987) 208 pages

Pop Ciprian

1. Wittstock, Gerd, *Injectivity of the module tensor product of semi-Ruan modules*, **J. Operator Theory 65 (2011)**, no. 1, 87–113. *Citeaza*: Pop, Ciprian. *Bimodules normés représentables sur des espaces hilbertiens* **Operator theoretical methods (Timişoara, 1998)**,331–370.

2. Wittstock, Gerd, *Injectivity of the module tensor product of semi-Ruan modules*, **J. Operator Theory 65 (2011)**, no. 1, 87–113. *Citeaza*:
   Anantharaman-Delaroche, Claire; Pop, Ciprian. *Relative tensor products and infinite C^*-algebras*, **Journal of Operator Theory 47 (2002)**, no. 2, 389–412.

Popa A. Alexandru

1. Templier, N., A nonsplit sum of coefficients of modular forms. **Duke Math. J. 157** (2011), 109165
   Citeaza: A. A. Popa, *Central values of Rankin L-series over real quadratic fields,* **Compos. Math. 142** (2006), 811866.

2. Einsiedler, M.; Lindenstrauss, E.; Michel, P.; Venkatesh, A., Distribution of periodic torus orbits and Duke's theorem for cubic fields, **Ann. of Math. (2) 173** (2011), 815885
   Citeaza: A. A. Popa, *Central values of Rankin L-series over real quadratic fields,* **Compos. Math. 142** (2006), 811866.

3. Trotabas, D., Non annulation des fonctions L des formes modulaires de Hilbert au point central, **Annales de l'institut Fourier 61**, (2011), p. 187-259
   Citeaza: A. A. Popa, *Central values of Rankin L-series over real quadratic fields,* **Compos. Math. 142** (2006), 811866.

4. Booker, A.R.; Krishnamurthy, A strengthening of the GL(2) converse theorem. **Compos. Math. 147** (2011), pag. 669715
   Citeaza: A. A. Popa, *Whittaker newforms for Archimedean representations*, **J. Number Theory 128** (2008), pag. 16371645

Popa Nicolae

1. M. Junge and T. Mei, BMO Spaces associated with semigroups of operators , **Mathematische Annalen DOI: 10.1007/s00208-011-0657-0** (04 March 2011)
Citeaza: Popa Nicolae, *Non-commutative bmo space*, **Arch. Math. (Basel), 74** (2000), pag. 111 -114

Popescu Andrei

1. Radim Belohlavek, Optimal decompositions of matrices with entries from residuated lattices, **Journal of Logic and Computation** (2011), to appear
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

2. Yong Chan Kim and Young Sun Kim, Relations and Upper Sets on Partially Ordered Sets, **International Mathematical Forum 6** (2011), pag. 899 – 908
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

3. Lankun Guo and Guo-Qiang Zhang and Qingguo Li, Fuzzy closure systems on Lordered sets, **Mathematical Logic Quarterly 57** (2011), pag. 281 – 291
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-commutative fuzzy Galois connections*, **Soft Comput. 7** (2003), pag. 458 – 467
   - Andrei Popescu, *A general approach to fuzzy concepts*, **Math. Log. Q. 50** (2004), pag. 265 – 280
   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

4. Mingwen Shao and Li Guo and Lan Li, A Novel Attribute Reduction Approach Based on the Object Oriented Concept Lattice, **Rough Sets and Knowledge Technology 6954** (2011), pag. 71 – 80
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

5. Yassine Djouadi and Henri Prade, Possibility-theoretic extension of derivation operators in formal concept analysis over fuzzy lattices, **Fuzzy Optimization and Decision Making 10** (2011), pag. 287 – 309
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

6. Yassine Djouadi and Didier Dubois and Henri Prade, Graduality, Uncertainty and Typicality in Formal Concept Analysis, **35 Years of Fuzzy Set Theory 261** (2011), pag. 127 – 147
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

7. Radim Belohlavek, What is a Fuzzy Concept Lattice? II, **Rough Sets, Fuzzy Sets, Data Mining and Granular Computing 6743** (2011), pag. 19 – 26
Citeaza:

   - George Georgescu and Andrei Popescu, *Concept lattices and similarity in non-commutative fuzzy logic*, **Fundam. Inform. 53** (2002), pag. 23 – 54
   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

8. A. Frascella, Fuzzy Galois connections under weak conditions, **Fuzzy Sets and Systems 172** (2011), pag. 33 – 50
Citeaza:

   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

9. Duo Pei and Mei-Zheng Li and Ju-Sheng Mi, Attribute reduction in fuzzy decision formal contexts, **ICMLC** (2011), pag. 204 – 208
Citeaza:

   - Andrei Popescu, *A general approach to fuzzy concepts*, **Math. Log. Q. 50** (2004), pag. 265 – 280
   - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

10. Didier Dubois and Henri Prade, Bridging gaps between several frameworks for the idea of granulation., **FOCI** (2011), pag. 59 – 65
Citeaza:

    - Andrei Popescu, *A general approach to fuzzy concepts*, **Math. Log. Q. 50** (2004), pag. 265 – 280
    - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

11. Hong-Zhi Yang and Leung Yee and Ming-Wen Shao, Rule acquisition and attribute reduction in real decision formal contexts, **Soft Comput. 15** (2011), pag. 1115 – 1128
Citeaza:

    - Andrei Popescu, *A general approach to fuzzy concepts*, **Math. Log. Q. 50** (2004), pag. 265 – 280
    - George Georgescu and Andrei Popescu, *Non-dual fuzzy connections*, **Arch. Math. Log. 43** (2004), pag. 1009 – 1039

12. T. Z. Wang and H. S. Xu, Constructing Domain Ontology Based on Fuzzy Set and Concept Lattice, **Applied Mechanics and Materials 63** (2011)
Citeaza:

    - Andrei Popescu, *A general approach to fuzzy concepts*, **Math. Log. Q. 50** (2004), pag. 265 – 280

13. Lankun Guo and Qingguo Li and Hongping Liu, A new framework of fuzzy concept analysis, **FSKD** (2011), pag. 30 – 34
Citeaza:

    - George Georgescu and Andrei Popescu, *Concept lattices and similarity in non-commutative fuzzy logic*, **Fundam. Inform. 53** (2002), pag. 23 – 54

14. Vilem Novak and Bernard De Baets, EQ-algebras, **Fuzzy Sets and Systems 160** (2009), pag. 2956 – 2978
Citeaza:

    - George Georgescu and Andrei Popescu, *Non-commutative fuzzy structures and pairs of weak negations*, **Fuzzy Sets and Systems 143** (2004), pag. 129 – 155

15. Hongjun Zhou and Bin Zhao, Generalized Bosbach and Riecan states based on relative negations in residuated lattices, **Fuzzy Sets Syst. 187** (2012), pag. 33 – 57
Citeaza:

    - George Georgescu and Andrei Popescu, *Similarity Convergence in Residuated Structures*, **Logic Journal of the IGPL 13** (2005), pag. 389 – 413

16. Răzvan Diaconescu, Borrowing interpolation, **Journal of Logic and Computation** (2011), to appear
Citeaza:

    - Daniel Găină and Andrei Popescu, *An Institution-independent Generalization of Tarski's Elementary Chain Theorem*, **J. Log. Comput. 16** (2006), pag. 713 – 735
    - Andrei Popescu and Traian-Florin Şerbănuţă and Grigore Roşu, *A Semantic Approach to Interpolation*, **FoSSaCS** (2006), pag. 307 – 321
    - Daniel Găină and Andrei Popescu, *An Institution-Independent Proof of the Robinson Consistency Theorem*, **Studia Logica 85** (2007), pag. 41 – 73

17. Răzvan Diaconescu and Ionuţ Ţuţu, On the algebra of structured specifications, **Theor. Comput. Sci. 412** (2011), pag. 3145 – 3174
Citeaza:

    - Andrei Popescu and Traian-Florin Şerbănuţă and Grigore Roşu, *A Semantic Approach to Interpolation*, **FoSSaCS** (2006), pag. 307 – 321

Popescu Dorin

1. Soleyman Jahan, Ali, Prime filtrations and primary decompositions of modules, **Comm. Algebra 39** (2011), pag. 116-124
Citeaza: J. Herzog, D. Popescu, *Finite filtrations of modules and shellable multicomplexes*, **Manuscripta Math 121** (2006), pag. 385-410

2. Keller, M. T., Shen, Y.H., Streib, N., Young S. J., On the Stanley depth of squarefree Veronese ideals, **J. Algebraic Combin. 33** (2011), pag. 313-324
Citeaza: D. Popescu, *Stanley depth of multigraded modules*, **J. Algebra 321** (2009), pag. 2782-2797

3. Francisco, C. A., Mermin, J., Schweig, J, Borel generators, **J. Algebra 332** (2011), pag. 522-542
Citeaza: D. Popescu, *Binomial cycle bases on Koszul homology modules*, **Comm. Algebra 36** (2008), pag. 1789-1800 si *Citeaza*: J. Herzog, D. Popescu, M. Vladoiu, *On the Ext-modules of ideals of Borel type*, **Contemp. Math. 331** (2003), pag. 171-186

4. Lindsey, M., A class of Hilbert series and the strong Lefschetz property, **Proc. AMS 139** (2011), pag. 79-92
Citeaza: D. Popescu, *The strong Lefschetz property and certain complete intersection extensions*, **Bull. Math. Soc. Sci. Math. Roumanie 48(96)** (2005), pag. 421-431

5. Gasharov, Vesselin; Murai, Satoshi; Peeva, Irena, Hilbert schemes and maximal Betti numbers over Veronese rings, **Math. Z. 267** (2011), pag. 155-172
Citeaza: Herzog, Jrgen; Popescu, Dorin, *Hilbert functions and generic forms*, **Compositio Math. 113** (1998), pag. 1- -22

Popescu Ionel

1. A. Basak, A. Bose, Limiting spectral distributions of some band matrices, **Periodica Mathematica Hungarica 63** (2011), pag. 113-150
Citeaza: I. Popescu, *General tridiagonal random matrix models, limiting distributions and fluctuations*, **Probab. Theory Related Fields, 144** (2009), pag. 179220

2. A. Bose, S Sen Finite Diagonal Random Matrices **Journal of Theoretical Probability** (2011) DOI: 10.1007/s10959-011-0378-z
Citeaza: I. Popescu, *General tridiagonal random matrix models, limiting distributions and fluctuations*, **Probab. Theory Related Fields, 144** (2009), pag. 179220

Prunaru Bebe

1. Long Long, Shifang Zhang, Fixed points of commutative super-operations, **Journal of Physics A: Mathematical and Theoretical 44** (2011), pag. 095201
Citeaza: B. Prunaru, *Toeplitz operators associated to commuting row contractions*, **J. Functional Analysis 254** (2008), pag. 1626–1641

2. Long Long, Shifang Zhang, Fixed points of commutative super-operations, **Journal of Physics A: Mathematical and Theoretical 44** (2011), pag. 095201
Citeaza: B. Prunaru, *Lifting fixed points of completely positive mappings*, **J. Mathematical Analysis and Applications 350** (2009), pag. 333 – 339

3. M. Didas, J. Eschmeier, Inner functions and spherical isometries, **Proc. Amer. Math. Soc. 139** (2011), pag. 2877 – 2889
Citeaza: B. Prunaru, *Some exact sequences for Toeplitz algebras of spherical isometries*, **Proc. Amer. Math. Soc.135** (2007), pag. 3621 – 3630

4. M. Didas, J. Eschmeier, K. Everard On the essential commutant of analytic Toeplitz operators associated with spherical isometries, **J. Functional Analysis 261** (2011), pag. 1361– 1383
Citeaza: B. Prunaru, *Some exact sequences for Toeplitz algebras of spherical isometries*, **Proc. Amer. Math. Soc.135** (2007), pag. 3621 – 3630

Purice Radu

1. Berlyand, Leonid; Misiats, Oleksandr; Rybalko, Volodymyr, Minimizers of the magnetic Ginzburg-Landau functional in simply connected domain with prescribed degree on the boundary, **Commun. Contemp. Math. 13** (2011), 53 – 66
Citeaza: Boutet de Monvel Berthier A, Georgescu V, **Purice R**, *A boundary value problem related to the Ginzburg-Landau model*, **Communications in Mathematical Physics 142** (1991), pag. 1 – 21

2. Beltiţă, Ingrid; Beltiţă, Daniel, Continuity of magnetic Weyl calculus, **J. Funct. Anal. 260** (2011), 1944 – 1968
Citeaza: Măntoiu, M; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

3. Beltiţă, Ingrid; Beltiţă, Daniel, Modulation spaces of symbols for representations of nilpotent Lie groups, **J. Fourier Anal. Appl. 17** (2011), 290 – 319
Citeaza: Măntoiu, M; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

4. De Nittis, Giuseppe; Lein, Max, Applications of magnetic ΨDO techniques to SAPT, **Rev. Math. Phys. 23** (2011), 233 – 260
Citeaza: Măntoiu, M; **Purice, R**:, *The magnetic Weyl calculus*, **Journal of Mathematical Physics 45** (2004), pag. 1394 – 1417

5. Beltiţă, Ingrid; Beltiţă, Daniel, Continuity of magnetic Weyl calculus, **J. Funct. Anal. 260** (2011), 1944 – 1968
Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

6. Beltiţă, Ingrid; Beltiţă, Daniel, Modulation spaces of symbols for representations of nilpotent Lie groups, **J. Fourier Anal. Appl. 17** (2011), 290 – 319
Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

7. De Nittis, Giuseppe; Lein, Max, Applications of magnetic ΨDO techniques to SAPT, **Rev. Math. Phys. 23** (2011), 233 – 260
Citeaza: Iftimie, V; Măntoiu, M; **Purice, R**:, *Magnetic pseudodifferential operators*, **Publ. Res. Inst. Math. Sci. 43** (2007), pag. 585 – 623

8. Tiedra de Aldecoa, Rafael: Asymptotics near $\pm m$ of the spectral shift function for Dirac operators with non-constant magnetic fields, **Comm. Partial Differential Equations 36** (2011), 10 – 41.
Citeaza: Boutet de Monvel-Berthier, Anne; Manda, Dragos; **Purice, Radu**:, *Limiting absorption principle for the Dirac operator*, **Ann. Inst. H. Poincaré Phys. Théor. 58** (1993), pag. 413 – 431.

9. Chandler-Wilde, Simon N.; Lindner, Marko: Limit operators, collective compactness, and the spectral theory of infinite matrices, **Mem. Amer. Math. Soc. 210** (2011), no. 989.
Citeaza: Amrein, W. O.; Măntoiu, M.; **Purice, R.**: *Propagation properties for Schrödinger operators affiliated with certain C^*-algebras*, **Ann. Henri Poincar 3** (2002), pag. 1215 – 1232.

10. De Nittis, Giuseppe; Lein, Max, Applications of magnetic ΨDO techniques to SAPT, **Rev. Math. Phys. 23** (2011), 233 – 260
Citeaza: Măntoiu, Marius; **Purice, Radu**; Richard, Serge:, *Twisted crossed products and magnetic pseudodifferential operators*, Advances in operator algebras and mathematical physics, 137 – 172, **Theta Ser. Adv. Math., 5**, Theta, Bucharest, 2005.

11. De Nittis, Giuseppe; Lein, Max, Applications of magnetic ΨDO techniques to SAPT, **Rev. Math. Phys. 23** (2011), 233 – 260
Citeaza: Iftimie, Viorel; Măntoiu, Marius; **Purice, Radu**:, *Commutator criteria for magnetic pseudodifferential operators*, **Comm. Partial Differential Equations 35** (2010), 1058 – 1094.

12. Beltiţă, Ingrid; Beltiţă, Daniel: Continuity of magnetic Weyl calculus, **J. Funct. Anal. 260** (2011), 1944 – 1968
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *The modulation mapping for magnetic symbols and operators*, **Proc. Amer. Math. Soc. 138** (2010), pag. 2839 – 2852

13. Beltiţă, Ingrid; Beltiţă, Daniel: Modulation spaces of symbols for representations of nilpotent Lie groups, **J. Fourier Anal. Appl. 17** (2011), 290 – 319
Citeaza: Măntoiu, Marius; **Purice, Radu**:, *The modulation mapping for magnetic symbols and operators*, **Proc. Amer. Math. Soc. 138** (2010), pag. 2839 – 2852

14. Faraj, Ali; Mantile, Andrea; Nier, Francis: Adiabatic evolution of 1D shape resonances: an artificial interface conditions approach, **Math. Models Methods Appl. Sci. 21** (2011), 541 – 618
Citeaza: Cornean, H. D.; Duclos, P.; Nenciu, G.; **Purice, R.**:, *Adiabatically switched-on electrical bias and the Landauer-Büttiker formula*, **J. Math. Phys. 49** (2008), no. 10, 102106, 20 pp.

Ramazan Birant

1. Bertozzini, Paolo; Conti, Roberto; Lewkeeratiyutkul, Wicharn, A horizontal categorification of Gel'fand duality, **Adv. Math. 226, no. 1** (2011), 584–607
Citeaza: V. Deaconu, A. Kumjian, B. Ramazan, *Fell bundles associated to groupoid morphisms*, **Math. Scand. 102 (2)** (2008), pag. 305–319

Radulescu Vicentiu

1. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 373** (2011), 30 – 43
Citeaza: F. Cirstea, V. Rădulescu, *Uniqueness of the blow-up boundary solution of logistic equations with absorption*, **C. R. Math. Acad. Sci. Paris 335** (2002), pag. 447 – 452.

2. Kefi, Khaled $p(x)$-Laplacian with indefinite weight, **Proc. Amer. Math. Soc. 139** (2011), 4351 – 4360
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

3. Mashiyev, R. A.; Buhrii, O. M. Existence of solutions of the parabolic variational inequality with variable exponent of nonlinearity, **J. Math. Anal. Appl. 377** (2011), 450 – 463
Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

4. Kefi, Khaled $p(x)$-Laplacian with indefinite weight, **Proc. Amer. Math. Soc. 139** (2011), 4351 – 4360
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

5. Benouhiba, Nawel On the eigenvalues of weighted $p(x)$-Laplacian on $\mathbb{R}^N$, **Nonlinear Anal. 74** (2011), 235 – 243
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

6. Mashiyev, R. A.; Buhrii, O. M. Existence of solutions of the parabolic variational inequality with variable exponent of nonlinearity, **J. Math. Anal. Appl. 377** (2011), 450 – 463
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

7. Zhai, Chengbo; Anderson, Douglas R. A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), 388 – 400
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

8. Filippucci, Roberta Nonexistence of nonnegative solutions of elliptic systems of divergence type, **J. Differential Equations 250** (2011), 572 – 595
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

9. Maagli, Habib Asymptotic behavior of positive solutions of a semilinear Dirichlet problem, **Nonlinear Anal. 74** (2011), 2941 – 2947
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

10. Ren, Xiaofeng; Wei, Juncheng A toroidal tube solution to a problem involving mean curvature and Newtonian potential, **Interfaces Free Bound. 13** (2011), 127 – 154
Citeaza: M. Ghergu, V. Rădulescu, *Singular elliptic problems: bifurcation and asymptotic analysis*, **Oxford Lecture Series in Mathematics and its Applications, 37. The Clarendon Press, Oxford University Press, Oxford** (2008), pag. xvi+298.

11. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 373** (2011), 30 – 43
Citeaza: F. Cirstea, V. Rădulescu, *Existence and uniqueness of blow-up solutions for a class of logistic equations*, **Commun. Contemp. Math. 4** (2002), pag. 559 – 586.

12. Adamowicz, Tomasz; Hästö, Peter Harnack's inequality and the strong $p(\cdot)$-Laplacian, **J. Differential Equations 250** (2011), 1631 – 1649
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

13. Vétois, Jérôme: The blow-up of critical anisotropic equations with critical directions, **NoDEA Nonlinear Differential Equations Appl. 18** (2011), 173 – 197
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

14. Costea, Nicusor Existence and uniqueness results for a class of quasi-hemivariational inequalities, **J. Math. Anal. Appl. 373** (2011), 305 – 315
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

15. Winkert, Patrick Multiple solution results for elliptic Neumann problems involving set-valued nonlinearities, **J. Math. Anal. Appl. 377** (2011), 121 – 134
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

16. Le, Vy Khoi Variational inequalities with general multivalued lower order terms given by integrals, **Adv. Nonlinear Stud. 11** (2011), 1 – 24
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

17. Lisei, Hannelore; Molnar, Andrea Eva; Varga, Csaba On a class of inequality problems with lack of compactness, **J. Math. Anal. Appl. 378** (2011), 741 – 748
Citeaza: D. Motreanu, V. Rădulescu, *Variational and non-variational methods in nonlinear analysis and boundary value problems*, **Nonconvex Optimization and its Applications, 67. Kluwer Academic Publishers, Dordrecht** (2003), pag. xii+375.

18. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 373** (2011), 30 – 43
Citeaza: F. Cirstea, V. Rădulescu, *Asymptotics for the blow-up boundary solution of the*

logistic equation with absorption, **C. R. Math. Acad. Sci. Paris 336** (2003), pag. 231 – 236.

19. Huang, Shuibo; Tian, Qiaoyu Second order estimates for large solutions of elliptic equations, **Nonlinear Anal. 74** (2011), 2031 – 2044
Citeaza: F. Cirstea, V. Rădulescu, *Asymptotics for the blow-up boundary solution of the logistic equation with absorption*, **C. R. Math. Acad. Sci. Paris 336** (2003), pag. 231 – 236.

20. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua A second-order estimate for blow-up solutions of elliptic equations, **Nonlinear Anal. 74** (2011), 2342 – 2350
Citeaza: F. Cirstea, V. Rădulescu, *Asymptotics for the blow-up boundary solution of the logistic equation with absorption*, **C. R. Math. Acad. Sci. Paris 336** (2003), pag. 231 – 236.

21. Mihailescu, Mihai An eigenvalue problem possessing a continuous family of eigenvalues plus an isolated eigenvalue, **Commun. Pure Appl. Anal. 10** (2011), 701 – 708
Citeaza: M. Mihailescu, V. Rădulescu, *Continuous spectrum for a class of nonhomogeneous differential operators*, **Manuscripta Math. 125** (2008), pag. 157 – 167.

22. Zhang, Qihu Existence, nonexistence and asymptotic behavior of boundary blow-up solutions to $p(x)$-Laplacian problems with singular coefficient, **Nonlinear Anal. 74** (2011), 2045 – 2061
Citeaza: M. Mihailescu, V. Rădulescu, *Continuous spectrum for a class of nonhomogeneous differential operators*, **Manuscripta Math. 125** (2008), pag. 157 – 167.

23. Loc, Nguyen Hoang; Schmitt, Klaus Boundary value problems for singular elliptic equations, **Rocky Mountain J. Math. 41** (2011), 555 – 572
Citeaza: M. Ghergu, V. Rădulescu, *Sublinear singular elliptic problems with two parameters*, **J. Differential Equations 195** (2003), pag. 520 – 536.

24. Zhai, Chengbo; Anderson, Douglas R. A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), 388 – 400
Citeaza: M. Ghergu, V. Rădulescu, *Sublinear singular elliptic problems with two parameters*, **J. Differential Equations 195** (2003), pag. 520 – 536.

25. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 373** (2011), 30 – 43
Citeaza: F. Cirstea, V. Rădulescu, *Nonlinear problems with boundary blow-up: a Karamata regular variation theory approach*, **Asymptot. Anal. 46** (2006), pag. 275 – 298.

26. Huang, Shuibo; Tian, Qiaoyu Second order estimates for large solutions of elliptic equations, **Nonlinear Anal. 74** (2011), 2031 – 2044
Citeaza: F. Cirstea, V. Rădulescu, *Nonlinear problems with boundary blow-up: a Karamata regular variation theory approach*, **Asymptot. Anal. 46** (2006), pag. 275 – 298.

27. Huang, Shuibo; Tian, Qiaoyu; Zhang, Shengzhi; Xi, Jinhua A second-order estimate for blow-up solutions of elliptic equations, **Nonlinear Anal. 74** (2011), 2342 – 2350
Citeaza: F. Cirstea, V. Rădulescu, *Nonlinear problems with boundary blow-up: a Karamata regular variation theory approach*, **Asymptot. Anal. 46** (2006), pag. 275 – 298.

28. Lisei, Hannelore; Molnar, Andrea Eva; Varga, Csaba On a class of inequality problems with lack of compactness, **J. Math. Anal. Appl. 378** (2011), 741 – 748
Citeaza: F. Gazzola, V. Rădulescu, *A nonsmooth critical point theory approach to some nonlinear elliptic equations in* $\mathbb{R}^n$, **Differential Integral Equations 13** (2000), pag. 47 – 60.

29. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 378** (2011), 30 – 43
Citeaza: F. Cirstea, V. Rădulescu, *Extremal singular solutions for degenerate logistic-type equations in anisotropic media*, **C. R. Math. Acad. Sci. Paris 339** (2004), pag. 119 – 124.

30. Maagli, Habib Asymptotic behavior of positive solutions of a semilinear Dirichlet problem, **Nonlinear Anal. 74** (2011), 2941 – 2947
Citeaza: F. Cirstea, V. Rădulescu, *Extremal singular solutions for degenerate logistic-type equations in anisotropic media*, **C. R. Math. Acad. Sci. Paris 339** (2004), pag. 119 – 124.

31. Precup, Radu Two positive nontrivial solutions for a class of semilinear elliptic variational systems, **J. Math. Anal. Appl. 373** (2011), 138 – 146
Citeaza: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467 – 475.

32. Filippucci, Roberta Nonexistence of nonnegative solutions of elliptic systems of divergence type, **J. Differential Equations 250** (2011), 572 – 595
Citeaza: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467 – 475.

33. Magliaro, Marco; Mari, Luciano; Mastrolia, Paolo; Rigoli, Marco Keller-Osserman type conditions for differential inequalities with gradient terms on the Heisenberg group, **J. Differential Equations 250** (2011), 2643 – 2670
Citeaza: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467 – 475.

34. Kefi, Khaled $p(x)$-Laplacian with indefinite weight, **Proc. Amer. Math. Soc. 139** (2011), 4351 – 4360
Citeaza: M. Mihailescu, V. Rădulescu, *Existence and multiplicity of solutions for quasilinear nonhomogeneous problems: an Orlicz-Sobolev space setting*, **J. Math. Anal. Appl. 330** (2007), pag. 416 – 432.

35. Hamydy, A.; Massar, M.; Tsouli, N. Existence of blow-up solutions for a non-linear equation with gradient term in $\mathbb{R}^N$, **J. Math. Anal. Appl. 377** (2011), 161 – 169
Citeaza: M. Ghergu, C. Niculescu, V. Rădulescu, *Explosive solutions of elliptic equations with absorption and non-linear gradient term*, **Proc. Indian Acad. Sci. Math. Sci. 112** (2002), pag. 441 – 451.

36. Magliaro, Marco; Mari, Luciano; Mastrolia, Paolo; Rigoli, Marco Keller-Osserman type conditions for differential inequalities with gradient terms on the Heisenberg group, **J. Differential Equations 250** (2011), 2643 – 2670
Citeaza: M. Ghergu, C. Niculescu, V. Rădulescu, *Explosive solutions of elliptic equations with absorption and non-linear gradient term*, **Proc. Indian Acad. Sci. Math. Sci. 112** (2002), pag. 441 – 451.

37. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 373** (2011), 30– 43
Citeaza: F. Cirstea, V. Rădulescu, *Boundary blow-up in nonlinear elliptic equations of Bieberbach–Rademacher type*, **Trans. Amer. Math. Soc. 359** (2007), pag. 3275 – 3286.

38. Zhai, Chengbo; Anderson, Douglas R. A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), 388– 400
Citeaza: M. Ghergu, V. Rădulescu, *Ground state solutions for the singular Lane-Emden-Fowler equation with sublinear convection term*, **J. Math. Anal. Appl. 333** (2007), pag. 265 – 273.

39. Lisei, Hannelore; Molnar, Andrea Eva; Varga, Csaba On a class of inequality problems with lack of compactness, **J. Math. Anal. Appl. 378** (2011), 741– 748
Citeaza: P. Panagiotopoulos, M. Fundo, V. Rădulescu, *Existence theorems of Hartman–Stampacchia type for hemivariational inequalities and applications*, **J. Global Optim. 15** (1999), pag. 41 – 54.

40. Costea, Nicusor Existence and uniqueness results for a class of quasi-hemivariational inequalities, **J. Math. Anal. Appl. 373** (2011), 305– 315
Citeaza: P. Panagiotopoulos, M. Fundo, V. Rădulescu, *Existence theorems of Hartman–Stampacchia type for hemivariational inequalities and applications*, **J. Global Optim. 15** (1999), pag. 41 – 54.

41. Zhai, Chengbo; Anderson, Douglas R. A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), pag. 388 – 400
Citeaza: L. Dupaigne, M. Ghergu, V. Rădulescu, *Lane-Emden-Fowler equations with convection and singular potential*, **J. Math. Pures Appl. (9) 87** (2007), pag. 563 – 581.

42. Xu, Zhonghai; Zheng, Jia Shan; Feng, Zhenguo Existence and regularity of nonnegative solution of a singular quasi-linear anisotropic elliptic boundary value problem with gradient terms, **Nonlinear Anal. 74** (2011), pag. 739 – 756
Citeaza: L. Dupaigne, M. Ghergu, V. Rădulescu, *Lane-Emden-Fowler equations with*

convection and singular potential, **J. Math. Pures Appl. (9) 87** (2007), pag. 563 – 581.

43. Cobzas, S. Completeness in quasi-metric spaces and Ekeland Variational Principle, **Topology Appl. 158** (2011), pag. 1073 – 1084
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

44. Aizicovici, Sergiu; Papageorgiou, Nikolaos S.; Staicu, Vasile Nonlinear resonant periodic problems with concave terms, **J. Math. Anal. Appl. 375** (2011), pag. 342 – 364
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

45. Candito, Pasquale; D'Agui, Giuseppina Three solutions to a perturbed nonlinear discrete Dirichlet problem, **J. Math. Anal. Appl. 375** (2011), pag. 594 – 601
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

46. Zhai, Chengbo; Anderson, Douglas R. A sum operator equation and applications to nonlinear elastic beam equations and Lane-Emden-Fowler equations, **J. Math. Anal. Appl. 375** (2011), pag. 388 – 400
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

47. Huang, Shuibo; Tian, Qiaoyu Boundary blow-up rates of large solutions for elliptic equations with convection terms, **J. Math. Anal. Appl. 373** (2011), 30 – 43
Citeaza: M. Ghergu, V. Rădulescu, *Nonradial blow-up solutions of sublinear elliptic equations with gradient term*, **Commun. Pure Appl. Anal. 3** (2004), pag. 465 – 474.

48. Hamydy, A.; Massar, M.; Tsouli, N. Existence of blow-up solutions for a non-linear equation with gradient term in $\mathbb{R}^N$, **J. Math. Anal. Appl. 377** (2011), 161 – 169
Citeaza: M. Ghergu, V. Rădulescu, *Nonradial blow-up solutions of sublinear elliptic equations with gradient term*, **Commun. Pure Appl. Anal. 3** (2004), pag. 465 – 474.

49. Magliaro, Marco; Mari, Luciano; Mastrolia, Paolo; Rigoli, Marco Keller-Osserman type conditions for differential inequalities with gradient terms on the Heisenberg group, **J. Differential Equations 250** (2011), 2643 – 2670
Citeaza: M. Ghergu, V. Rădulescu, *Nonradial blow-up solutions of sublinear elliptic equations with gradient term*, **Commun. Pure Appl. Anal. 3** (2004), pag. 465 – 474.

50. Costea, Nicusor Existence and uniqueness results for a class of quasi-hemivariational inequalities, **J. Math. Anal. Appl. 373** (2011), pag. 305 – 315

Citeaza: D. Motreanu, V. Rădulescu, *Existence results for inequality problems with lack of convexity*, **Numer. Funct. Anal. Optim. 21** (2000), pag. 869 – 884.

51. Jia, Huilian; Li, Dongsheng; Wang, Lihe Global regularity for divergence form elliptic equations in Orlicz spaces on quasiconvex domains, **Nonlinear Anal. 74** (2011), 1336 – 1344
Citeaza: M. Mihailescu, V. Rădulescu, *A continuous spectrum for nonhomogeneous differential operators in Orlicz-Sobolev spaces*, **Math. Scand. 104** (2009), pag. 132 – 146.

52. Vétois, Jérôme Existence and regularity for critical anisotropic equations with critical directions, **Adv. Differential Equations 16** (2011), 61 – 83
Citeaza: M. Mihailescu, V. Rădulescu, S. Tersian, *Eigenvalue problems for anisotropic discrete boundary value problems*, **J. Difference Equ. Appl. 15** (2009), pag. 557 – 567.

53. Candito, Pasquale; D'Agui, Giuseppina Three solutions to a perturbed nonlinear discrete Dirichlet problem, **J. Math. Anal. Appl. 375** (2011), 594 – 601
Citeaza: M. Mihailescu, V. Rădulescu, S. Tersian, *Eigenvalue problems for anisotropic discrete boundary value problems*, **J. Difference Equ. Appl. 15** (2009), pag. 557 – 567.

54. Costea, Nicusor Existence and uniqueness results for a class of quasi-hemivariational inequalities, **J. Math. Anal. Appl. 373** (2011), pag. 305 – 315
Citeaza: N. Costea, V. Rădulescu, *Existence results for hemivariational inequalities involving relaxed $\eta - \alpha$ monotone mappings*, **Commun. Appl. Anal. 13** (2009), pag. 293 – 303.

55. Ren, Xiaofeng; Wei, Juncheng A toroidal tube solution to a problem involving mean curvature and Newtonian potential, **Interfaces Free Bound. 13** (2011), pag. 127 – 154
Citeaza: M. Ghergu, V. Rădulescu, *A singular Gierer-Meinhardt system with different source terms*, **Proc. Roy. Soc. Edinburgh Sect. A 138** (2008), pag. 1215 – 1234.

56. Jia, Huilian; Li, Dongsheng; Wang, Lihe Global regularity for divergence form elliptic equations in Orlicz spaces on quasiconvex domains, **Nonlinear Anal. 74** (2011), pag. 1336 – 1344
Citeaza: M. Mihailescu, V. Rădulescu, D. Repovs, *On a non-homogeneous eigenvalue problem involving a potential: an Orlicz-Sobolev space setting*, **J. Math. Pures Appl. (9) 93** (2010), pag. 132 – 148.

57. Mashiyev, R. A.; Buhrii, O. M. Existence of solutions of the parabolic variational inequality with variable exponent of nonlinearity, **J. Math. Anal. Appl. 377** (2011), pag. 450 – 463
Citeaza: M. Mihailescu, V. Rădulescu, D. Repovs, *On a non-homogeneous eigenvalue problem involving a potential: an Orlicz-Sobolev space setting*, **J. Math. Pures Appl. (9) 93** (2010), pag. 132 – 148.

58. Xu, Zhong, Zheng, Jia Shan, Feng, Zhenguo: Existence and regularity of nonnegative solution of a singular quasi-linear anisotropic elliptic boundary value problem with gradient terms, **Nonlinear Anal. 74** (2011), pag. 739 – 756

Citeaza: F. Cirstea, V. Rădulescu, *Existence implies uniqueness for a class of singular anisotropic elliptic boundary value problems*, **Math. Methods Appl. Sci. 24** (2001), pag. 771 – 779.

59. Costea, Nicusor: Existence and uniqueness results for a class of quasi-hemivariational inequalities, **J. Math. Anal. Appl. 373** (2011), pag. 305 – 315
Citeaza: N. Costea, V. Rădulescu, *Hartman-Stampacchia results for stably pseudomonotone operators and non-linear hemivariational inequalities*, **Appl. Anal. 89** (2010), pag. 175 – 188.

60. Lisei, Hanelore, Molnar, Andrea Eva, Varga, Csaba: On a class of inequality problems with lack of compactness, **J. Math. Anal. Appl. 378** (2011), pag. 741 – 748
Citeaza: V. Rădulescu, D. Repovs, *Existence results for variational-hemivariational problems with lack of convexity*, **Nonlinear Anal. 73** (2010), pag. 99 – 104.

Rasdeaconu Rares

1. R. Torres, *On Einstein metrics, normalized Ricci flow and smooth structures on* $3\mathbb{CP}^2\#k\overline{\mathbb{CP}}^2$, va aparea in **Journal of Geometry and Physics** (2011)
Citeaza: R. Răsdeaconu, I. Şuvaina, *Smooth structures and Einstein metrics on* $\mathbb{CP}^2\#5,\ 6,\ 7\overline{\mathbb{CP}}^2$, **Math. Proc. Cambridge Philos. Soc. 147,** (2009), no. 2, 409–417.

2. R. Torres, *On Einstein metrics, normalized Ricci flow and smooth structures on* $3\mathbb{CP}^2\#k\overline{\mathbb{CP}}^2$, va aparea in **Journal of Geometry and Physics** (2011)
Citeaza: R. Răsdeaconu, I. Şuvaina, *On normalized Ricci flow and smooth structures on four-manifolds with* $b^+ = 1$, **Arch. Math. (Basel) 92,** (2009), no. 4, 355–365.

Staic Mihai

1. Tao Yang and Shuanhong Wang, Constructing New Braided T-Categories Over Regular Multiplier Hopf Algebras, **Communications in Algebra, Volume 39** (2011), pag. 3073–3089
Citeaza: Florin Panaite and Mihai Staic, *Generalized (anti) Yetter-Drinfeld modules as components of a braided T-category*, **Israel J. Math. 158** (2007), pag. 349-365.
Citeaza: Mihai Staic, *A note on anti-Yetter-Drinfeld modules*, **Contemp. Math., 441** (2007), pag. 149-153.

Stavre Ruxandra

1. S. Challal, A. Lyaghfouri, The heterogeneous dam problem with leaky boundary condition, **Communications on Pure and Applied Analysis 10** (2011), pag. 93 – 125
Citeaza: R. Stavre, B. Vernescu, *Incompressible fluid flow through a non-homogeneous and anisotropic dam*, **Nonlin. Anal. TMA 9** (1985), pag. 799 – 810

2. Igor Pažanin, Asymptotic Behavior of Micropolar Fluid Flow Through a Curved Pipe, **Acta Applicandae Mathematicae 116** (2011), pag. 1 – 25
Citeaza: R. Stavre, *The control of the pressure for a micropolar fluid*, **Z. angew. Math. Phys. (ZAMP) 53** (2002), pag. 912 – 922

3. Igor Pažanin, Asymptotic Behavior of Micropolar Fluid Flow Through a Curved Pipe, **Acta Applicandae Mathematicae 116** (2011), pag. 1 – 25
Citeaza: D. Dupuy, G. Panasenko, R. Stavre, *Asymptotic methods for micropolar flows in a tube structure*, **Math. Mod. Meth. Appl. Sci. 14** (2004), pag. 735 – 758

4. Igor Pažanin, Asymptotic Behavior of Micropolar Fluid Flow Through a Curved Pipe, **Acta Applicandae Mathematicae 116** (2011), pag. 1 – 25
Citeaza: D. Dupuy, G. Panasenko, R. Stavre, *Asymptotic solution for a micropolar flow in a curvilinear tube*, **Z. angew. Math. Mech. (ZAMM) 88** (2008), pag. 793 – 807

5. S.G. Pyatkov, On some classes of inverse problems for parabolic equations, **Journal of Inverse and Ill-posed Problems 18** (2011), pag. 917 – 934
Citeaza: A. Capatina, R. Stavre, *A control problem in biconvective flow*, **J. Math. Kyoto Univ. 37** (1997), pag. 567 – 584

6. S.G. Pyatkov, B.N. Tsbikov, On some classes of inverse problems for parabolic and elliptic equations, **Journal of Evolution Equations 11** (2011), pag. 155 – 186
Citeaza: A. Capatina, R. Stavre, *A control problem in biconvective flow*, **J. Math. Kyoto Univ. 37** (1997), pag. 567 – 584

7. G. V. Alekseev, D.A. Tereshko, Two-parameter extremum problems of boundary control for stationary thermal convection equations, **Computational Mathematics and Mathematical Physics 51** (2011), pag. 1539 – 1557
Citeaza: R. Stavre, *Distributed control of a heat-conducting, time-dependent,Navier-Stokes fluid*, **Glasgow Math. J. 44** (2002), pag. 191 – 200

8. Igor Pažanin, Effective flow of micropolar fluid through a thin or long pipe, **Mathematical Problems in Engineering 2011** (2011), Article ID 127070 18 pages
Citeaza: D. Dupuy, G. Panasenko, R. Stavre, *Asymptotic methods for micropolar flows in a tube structure*, **Math. Mod. Meth. Appl. Sci. 14** (2004), pag. 735 – 758

9. Igor Pažanin, Effective flow of micropolar fluid through a thin or long pipe, **Mathematical Problems in Engineering 2011** (2011), Article ID 127070 18 pages
Citeaza: D. Dupuy, G. Panasenko, R. Stavre, *Asymptotic solution for a micropolar flow in a curvilinear tube*, **Z. angew. Math. Mech. (ZAMM) 88** (2008), pag. 793 – 807

10. C.K. Chen, M.C. Lin, C.I. Chen, Stability analysis of a thin micropolar fluid flowing on a rotating circular disk, **Journal of Mechanics 27** (2011), pag. 95 – 105
Citeaza: D. Dupuy, G. Panasenko, R. Stavre, *Asymptotic analysis for micropolar fluids*, **Comptes rendus de l'Académie des Sciences-Mécanique (CRAS) 332** (2004), pag. 31 – 36

Timofte Aida

1. Matthias Liero, Alexander Mielke an evolutionary elastoplastic plate model derived via Gamma-convergence, **Mathematical Models and Methods in Applied Sciences 21** (2011), 1961 – 1986
Citeaza: Alexander Mielke, Aida Timofte, *Two-scale homogenization for evolutionary variational inequalities via the energetic formulation*, **SIAM Journal on Mathematical Analysis 39** (2007), pag. 642 – 668

2. Hauke, Hanke, Homogenization in gradient plasticity, **Mathematical Models and Methods in Applied Sciences 21** (2011), 1651 – 1684
Citeaza: Alexander Mielke, Aida Timofte, *Two-scale homogenization for evolutionary variational inequalities via the energetic formulation*, **SIAM Journal on Mathematical Analysis 39** (2007), pag. 642 – 668

3. Stefan Neukamm, Philipp Emanuel Stelzig, On the interplay of two-scale convergence and translation, **Asymptotic Analysis 71** (2011), 163 – 183
Citeaza: Alexander Mielke, Aida Timofte, *Two-scale homogenization for evolutionary variational inequalities via the energetic formulation*, **SIAM Journal on Mathematical Analysis 39** (2007), pag. 642 – 668

4. Miehe, C. Rosato, D., A rate-dependent incremental variational formulation of ferroelectricity, **International Journal of Engineering Science 49** (2011), pag. 466 – 496
Citeaza: Alexander Mielke, Aida M. Timofte, *Modeling and Analytical Study for Ferroelectric Materials*, **Mechanics of Advanced Materials and Structures 13** (2006), pag. 457 – 462

5. Miehe, C. Rosato, D., Kiefer, B., Variational principles in dissipative electro-magneto-mechanics: A framework for the macro-modeling of functional materials, **International Journal for Numerical Methods in Engineering 86** (2011), pag. 1225 – 1276
Citeaza: Alexander Mielke, Aida Timofte, *An energetic material model for time-dependent ferroelectric behaviour: existence and uniqueness*, **Mathematical Methods in the Applied Sciences 29** (2006), pag. 1393 – 1410

Timofte Vlad

1. C. Riener, On the degree and half-degree principle for symmetric polynomials, **Journal of Pure and Applied Algebra** (2011),
DOI: 10.1016/j.jpaa.2011.08.012, Available online 25.09.2011,
Citeaza: V. Timofte, *On the positivity of symmetric polynomial functions. Part I: General results*, **J. Math. Anal. Appl. 284** (2003), pag. 174–190.

2. A. Kovačec, S. Kuhlmann, C. Riener, A note on extrema of linear combinations of elementary symmetric functions, **Linear and Multilinear Algebra** (2011),
DOI:10.1080/03081087.2011.588438, Available online 25.08.2011,
Citeaza: V. Timofte, *On the positivity of symmetric polynomial functions. Part I: General results*, **J. Math. Anal. Appl. 284** (2003), pag. 174–190.

3. T. Trif, On certain sequences derived from generalized Euler-Mascheroni constants, **Journal of Mathematical Inequalities 5** (2011), pag 107–116,
Citeaza: V. Timofte, *Integral estimates for convergent positive series*, **J. Math. Anal. Appl. 303** (2005), pag. 90–102.

Timotin Dan

1. Ball, Joseph A.; Kheifets, Alexander, The inverse commutant lifting problem. I: coordinate-free formalism, **Integral Equations Operator Theory 70** (2011), pag. 17–62.
Citeaza: Ball, J. A.; Li, W. S.; Timotin, D.; Trent, T. T., *A commutant lifting theorem on the polydisc*, **Indiana Univ. Math. J. 48** (1999), pag. 653–675.

2. Arcozzi, Nicola; Rochberg, Richard; Sawyer, Eric T.; Wick, Brett D., The Dirichlet space: a survey, **New York J. Math. 17A** (2011), pag. 45–86.
Citeaza: Ambrozie, Călin-Grigore; Timotin, Dan, *On an intertwining lifting theorem for certain reproducing kernel Hilbert spaces*, **Integral Equations Operator Theory 42** (2002), pag. 373–384.

3. Ball, Joseph A.; Kheifets, Alexander, The inverse commutant lifting problem. I: coordinate-free formalism, **Integral Equations Operator Theory 70** (2011), pag. 17–62.
Citeaza: Li, W. S.; Timotin, D., *The relaxed intertwining lifting in the coupling approach*, **Integral Equations Operator Theory 54** (2006), pag. 97–111.

4. Bakonyi, M.; Timotin, D., Extensions of positive definite functions on amenable groups, **Canad. Math. Bull. 54** (2011), pag. 3–11.
Citeaza: Bakonyi, M.; Timotin, D, *Extensions of positive definite functions on free groups*, **J. Funct. Anal. 246** (2007), pag. 31–49.

5. Cichoń, Dariusz; Stochel, Jan; Szafraniec, Franciszek Hugon, Extending positive definiteness, **Trans. Amer. Math. Soc. 363** (2011), pag. 545-577.
Citeaza: Bakonyi, M.; Timotin, D, *Extensions of positive definite functions on free groups*, **J. Funct. Anal. 246** (2007), pag. 31–49.

6. Carlsson, Marcus, On truncated Wiener-Hopf operators and $BMO(\mathbb{Z})$, **Proc. Amer. Math. Soc. 139** (2011), pag. 1717-1733.
Citeaza: Bakonyi, Mihály; Timotin, Dan, *On an extension problem for polynomials*, **Bull. London Math. Soc. 33** (2001), pag. 599–605.

7. Bercovici, H.; Li, W. S.; Timotin, D, A family of reductions for Schubert intersection problems, **J. Algebraic Combin. 33** (2011), pag. 609-649.
Citeaza: Bercovici, H.; Collins, B.; Dykema, K.; Li, W. S.; Timotin, D, *Intersections of Schubert varieties and eigenvalue inequalities in an arbitrary finite factor*, **J. Funct. Anal. 258** (2010), pag. 1579–1627.

8. Bakonyi, M.; Timotin, D., Extensions of positive definite functions on amenable groups, **Canad. Math. Bull. 54** (2011), pag. 3-11.
Citeaza: Timotin, Dan, *Completions of matrices and the commutant lifting theorem*, **J. Funct. Anal. 104** (1992), pag. 291–298.

9. Carlsson, Marcus, On truncated Wiener-Hopf operators and $BMO(\mathbb{Z})$, **Proc. Amer. Math. Soc. 139** (2011), pag. 1717-1733.
Citeaza: Baranov, Anton; Chalendar, Isabelle; Fricain, Emmanuel; Mashreghi, Javad; Timotin, Dan, *Bounded symbols and reproducing kernel thesis for truncated Toeplitz operators*, **J. Funct. Anal. 259** (2010), pag. 2673-2701.

Torok Andrei

1. • A relationship between twisted conjugacy classes and the geometric invariants Omega (n) Author(s): Koban Nic; Wong Peter Source: GEOMETRIAE DEDICATA Volume: 151 Issue: 1 Pages: 233-243 DOI: 10.1007/s10711-010-9530-7 Published: APR 2011

Citează: ABOUT THE AUTOMORPHISM GROUP OF A FREE PRODUCT OF GROUPS Author(s): NITICA V ; TOROK A Source: ARCHIV DER MATHEMATIK Volume: 58 Issue: 3 Pages: 214-219 DOI: 10.1007/BF01292919 Published: MAR 4 1992

2. • SMOOTH DEPENDENCE ON PARAMETERS OF SOLUTIONS TO COHOMOLOGY EQUATIONS OVER ANOSOV SYSTEMS WITH APPLICATIONS TO COHOMOLOGY EQUATIONS ON DIFFEOMORPHISM GROUPS Author(s): de la Llave Rafael; Windsor Alistair Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1141-1154 DOI: 10.3934/dcds.2011.29.1141 Published: MAR 10 2011

   Citează: COHOMOLOGY OF DYNAMICAL-SYSTEMS AND RIGIDITY OF PARTIALLY HYPERBOLIC ACTIONS OF HIGHER-RANK LATTICES Author(s): NITICA V ; TOROK A Source: DUKE MATHEMATICAL JOURNAL Volume: 79 Issue: 3 Pages: 751-810 DOI: 10.1215/S0012-7094-95-07920-4 Published: SEP 1995

3. • SMOOTH DEPENDENCE ON PARAMETERS OF SOLUTIONS TO COHOMOLOGY EQUATIONS OVER ANOSOV SYSTEMS WITH APPLICATIONS TO COHOMOLOGY EQUATIONS ON DIFFEOMORPHISM GROUPS Author(s): de la Llave Rafael; Windsor Alistair Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1141-1154 DOI: 10.3934/dcds.2011.29.1141 Published: MAR 10 2011

   • Livsic Theorem for matrix cocycles Author(s): Kalinin Boris Source: ANNALS OF MATHEMATICS Volume: 173 Issue: 2 Pages: 1025-1042 DOI: 10.4007/annals.2011.173.2.11 Published: MAR 2011

   Citează: COHOMOLOGY OF DYNAMICAL-SYSTEMS AND RIGIDITY OF PARTIALLY HYPERBOLIC ACTIONS OF HIGHER-RANK LATTICES Author(s): NITICA V ; TOROK A Source: DUKE MATHEMATICAL JOURNAL Volume: 79 Issue: 3 Pages: 751-810 DOI: 10.1215/S0012-7094-95-07920-4 Published: SEP 1995

4. • SMOOTH DEPENDENCE ON PARAMETERS OF SOLUTIONS TO COHOMOLOGY EQUATIONS OVER ANOSOV SYSTEMS WITH APPLICATIONS TO COHOMOLOGY EQUATIONS ON DIFFEOMORPHISM GROUPS Author(s): de la Llave Rafael; Windsor Alistair Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1141-1154 DOI: 10.3934/dcds.2011.29.1141 Published: MAR 10 2011

   Citează: Regularity results for the solutions of the Livsic cohomology equation with values in diffeomorphism groups Author(s): Nitica V ; Torok A Source: ERGODIC THEORY AND DYNAMICAL SYSTEMS Volume: 16 Pages: 325-333 Part: Part 2 Published: APR 1996

5. • Backlund transformations for transparent connections Author(s): Paternain Gabriel P. Source: JOURNAL FUR DIE REINE UND ANGEWANDTE MATHEMATIK Volume: 658 Pages: 27-37 DOI: 10.1515/CRELLE.2011.058 Published: SEP 2011

   • Livsic Theorem for matrix cocycles Author(s): Kalinin Boris Source: ANNALS OF MATHEMATICS Volume: 173 Issue: 2 Pages: 1025-1042 DOI: 10.4007/annals.2011.173.2.11 Published: MAR 2011

Citează: Regularity of the transfer map for cohomologous cocycles Author(s): Nitica V ; Torok A Source: ERGODIC THEORY AND DYNAMICAL SYSTEMS Volume: 18 Pages: 1187-1209 DOI: 10.1017/S0143385798117480 Part: Part 5 Published: OCT 1998

6. • Nonuniform measure rigidity Author(s): Kalinin Boris; Katok Anatole; Rodriguez Hertz Federico Source: ANNALS OF MATHEMATICS Volume: 174 Issue: 1 Pages: 361-400 DOI: 10.4007/annals.2011.174.1.10 Published: JUL 2011

   Citează: Non-abelian cohomology of abelian Anosov actions Author(s): Katok A; Nitica V; Torok A Source: ERGODIC THEORY AND DYNAMICAL SYSTEMS Volume: 20 Pages: 259-288 DOI: 10.1017/S0143385700000122 Part: Part 1 Published: FEB 2000

7. • STABLE TRANSITIVITY FOR EXTENSIONS OF HYPERBOLIC SYSTEMS BY SEMIDIRECT PRODUCTS OF COMPACT AND NILPOTENT LIE GROUPS Author(s): Nitica Viorel Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1197-1204 DOI: 10.3934/dcds.2011.29.1197 Published: MAR 10 2011

   Citează: An open dense set of stably ergodic diffeomorphisms in a neighborhood of a non-ergodic one Author(s): Nitica V ; Torok A Source: TOPOLOGY Volume: 40 Issue: 2 Pages: 259-278 DOI: 10.1016/S0040-9383(99)00060-9 Published: MAR 2001

8. • A note on diffusion limits of chaotic skew-product flows Author(s): Melbourne I.; Stuart A. M. Source: NONLINEARITY Volume: 24 Issue: 4 Pages: 1361-1367 DOI: 10.1088/0951-7715/24/4/018 Published: APR 2011

   Citează: Statistical limit theorems for suspension flows Author(s): Melbourne I; Torok A Source: ISRAEL JOURNAL OF MATHEMATICS Volume: 144 Pages: 191-209 DOI: 10.1007/BF02916712 Published: 2004

9. • Evolving Symmetry for Modular System Design Author(s): Valsalam Vinod K.; Miikkulainen Risto Source: IEEE TRANSACTIONS ON EVOLUTIONARY COMPUTATION Volume: 15 Issue: 3 Special Issue: SI Pages: 368-386 DOI: 10.1109/TEVC.2011.2112663 Published: JUN 2011

   Citează: Bifurcation on the visual cortex with weakly anisotropic lateral coupling Author(s): Golubitsky M ; Shiau LJ ; Torok A Source: SIAM JOURNAL ON APPLIED DYNAMICAL SYSTEMS Volume: 2 Issue: 2 Pages: 97-143 Article Number: PII S1111111102409882 DOI: 10.1137/S1111111102409882 Published: 2003

10. • SYNCHRONOUS/ASYNCHRONOUS PATTERNS IN THREE-CELL NETWORKS WITH MULTIPLE TIME DELAYS Author(s): Yuan Yuan; Li Lei Source: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS Volume: 21 Issue: 6 Pages: 1701-1718 DOI: 10.1142/S0218127411029379 Published: JUN 2011

    • PHASE OSCILLATORS WITH SINUSOIDAL COUPLING INTERPRETED IN TERMS OF PROJECTIVE GEOMETRY Author(s): Stewart Ian Source: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS Volume: 21 Issue: 6 Pages: 1795-1804 DOI: 10.1142/S0218127411029446 Published: JUN 2011

- Sequentially firing neurons confer flexible timing in neural pattern generators Author(s): Urban Alexander; Ermentrout Bard Source: PHYSICAL REVIEW E Volume: 83 Issue: 5 Article Number: 051914 DOI: 10.1103/PhysRevE.83.051914 Part: Part 1 Published: MAY 16 2011
- Hopf-pitchfork singularities in coupled systems Author(s): Drubi Fatima; Ibanez Santiago; Angel Rodriguez J. Source: PHYSICA D-NONLINEAR PHENOMENA Volume: 240 Issue: 9-10 Pages: 825-840
  DOI: 10.1016/j.physd.2010.12.013 Published: APR 15 2011
- Dynamics of Coupled Cell Networks: Synchrony, Heteroclinic Cycles and Inflation Author(s): Aguiar M.; Ashwin P.; Dias A.; et al. Source: JOURNAL OF NONLINEAR SCIENCE Volume: 21 Issue: 2 Pages: 271-323 DOI: 10.1007/s00332-010-9083-9 Published: APR 2011
- Mesoscale and clusters of synchrony in networks of bursting neurons Author(s): Belykh Igor; Hasler Martin Source: CHAOS Volume: 21 Issue: 1 Article Number: 016106 DOI: 10.1063/1.3563581 Published: MAR 2011
- Inflation of strongly connected networks Author(s): Agarwal Nikita Source: MATHEMATICAL PROCEEDINGS OF THE CAMBRIDGE PHILOSOPHICAL SOCIETY Volume: 150 Pages: 367-384 DOI: 10.1017/S0305004110000654 Part: Part 2 Published: MAR 2011

Citează: Patterns of synchrony in coupled cell networks with multiple arrows Author(s): Golubitsky M ; Stewart I ; Torok A Source: SIAM JOURNAL ON APPLIED DYNAMICAL SYSTEMS Volume: 4 Issue: 1 Pages: 78-100 DOI: 10.1137/040612634 Published: 2005

11. - STABLE TRANSITIVITY FOR EXTENSIONS OF HYPERBOLIC SYSTEMS BY SEMIDIRECT PRODUCTS OF COMPACT AND NILPOTENT LIE GROUPS Author(s): Nitica Viorel Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1197-1204
    DOI: 10.3934/dcds.2011.29.1197 Published: MAR 10 2011

    Citează: Stable ergodicity for smooth compact Lie group extensions of hyperbolic basic sets Author(s): Field M ; Melbourne I ; Torok A Source: ERGODIC THEORY AND DYNAMICAL SYSTEMS Volume: 25 Pages: 517-551 DOI: 10.1017/S0143385704000355 Part: Part 2 Published: APR 2005

12. - STABLE TRANSITIVITY FOR EXTENSIONS OF HYPERBOLIC SYSTEMS BY SEMIDIRECT PRODUCTS OF COMPACT AND NILPOTENT LIE GROUPS Author(s): Nitica Viorel Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1197-1204
    DOI: 10.3934/dcds.2011.29.1197 Published: MAR 10 2011

    Citează: Stable transitivity of certain noncompact extensions of hyperbolic systems Author(s): Melbourne I ; Nitica V ; Torok A Source: ANNALES HENRI POINCARE Volume: 6 Issue: 4 Pages: 725-746 DOI: 10.1007/s00023-005-0221-0 Published: AUG 2005

13. - STABLE TRANSITIVITY FOR EXTENSIONS OF HYPERBOLIC SYSTEMS BY SEMIDIRECT PRODUCTS OF COMPACT AND NILPOTENT LIE GROUPS

Author(s): Nitica Viorel Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1197-1204
DOI: 10.3934/dcds.2011.29.1197 Published: MAR 10 2011

14. A note about stable transitivity of noncompact extensions of hyperbolic systems Author(s): Melbourne I ; Nitica V ; Torok A Conference: 5th International Conference on Dynamical Systems and Differential Equationss Location: Pomona, CA Date: JUN 16-19, 2004 Sponsor(s): AIMS Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 14 Issue: 2 Pages: 355-363 Published: FEB 2006

    - Semiclassical origin of the spectral gap for transfer operators of a partially expanding map Author(s): Faure Frederic Source: NONLINEARITY Volume: 24 Issue: 5 Pages: 1473-1498 DOI: 10.1088/0951-7715/24/5/005 Published: MAY 2011
    - Spectra of Ruelle transfer operators for Axiom A flows Author(s): Stoyanov Luchezar Source: NONLINEARITY Volume: 24 Issue: 4 Pages: 1089-1120
      DOI: 10.1088/0951-7715/24/4/005 Published: APR 2011
    - Exponential mixing for smooth hyperbolic suspension flows Author(s): Field Michael J. Source: REGULAR & CHAOTIC DYNAMICS Volume: 16 Issue: 1-2 Pages: 90-103 DOI: 10.1134/S1560354711010023 Published: FEB 2011

    Citează: Stability of mixing and rapid mixing for hyperbolic flows Author(s): Field Michael ; Melbourne Ian ; Torok Andrei Source: ANNALS OF MATHEMATICS Volume: 166 Issue: 1 Pages: 269-291 Published: JUL 2007

15. • STABLE TRANSITIVITY FOR EXTENSIONS OF HYPERBOLIC SYSTEMS BY SEMIDIRECT PRODUCTS OF COMPACT AND NILPOTENT LIE GROUPS Author(s): Nitica Viorel Source: DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS Volume: 29 Issue: 3 Pages: 1197-1204
    DOI: 10.3934/dcds.2011.29.1197 Published: MAR 10 2011

    Citează: Transitivity of Euclidean-type extensions of hyperbolic systems Author(s): Melbourne I. ; Nitica V. ; Torok A. Source: ERGODIC THEORY AND DYNAMICAL SYSTEMS Volume: 29 Pages: 1585-1602 DOI: 10.1017/S0143385708000886 Published: OCT 2009

Vajaitu Marian

1. Z. W. Sun and W. Zhang, Binomial coefficients and the ring of p-adic integers, **Proc. American Mathematical Society, 139, no. 5** (2011), pag. 1569 – 1577.
   Citeaza: C. Cobeli, M. Vâjâitu, A. Zaharescu, *The sequence* $n!$ (mod p), **Journal of the Ramanujan Math. Soc., 15** (2000), pag. 135 – 154

2. Badziahin, Dmitry A.; Haynes, Alan K. *A note on Farey fractions with denominators in arithmetic progressions*, **Acta Arith. 147** (2011), no. 3, 205215. *Citeaza*: Alkan, Emre; Ledoan, Andrew H.; Vjitu, Marian; Zaharescu, Alexandru *Discrepancy of fractions with divisibility constraints*, **Monatsh. Math. 149** (2006), no. 3, 179–192.

3. N.C. Bonciocat, A. Zaharescu, Irreducible multivariate polynomials obtained from polynomials in fewer variables, II, **Proc. Indian. Acad. Sci. Math. Sci. 121, no. 2** (2011), pag. 133 – 141

Citeaza: M. Cavachi, M. Vâjâitu, A. Zaharescu, *An irreducibility criterion for polynomials in several variables*, **Acta Math. Univ. Ostrav. 12** (2004), pag. 13 – 18

4. A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, Bounds for the multiplicities of the irreducible factors of, a multivariate polynomial, **Communications in Algebra, 39** (2011), pag. 1131 – 1138
Citeaza: M. Cavachi, M. Vâjâitu, A. Zaharescu, *An irreducibility criterion for polynomials in several variables*, **Acta Math. Univ. Ostrav. 12** (2004), pag. 13 – 18

5. K. Fallahi, K. Nourouzi, Modular locally constant mappings in vector ultrametric spaces, **Abstract and Applied Analysis, 2011** (2011), pag. 1– 8
Citeaza: M. Vâjâitu, A. Zaharescu, *Groups of isometries on ultrametric spaces*, **Bull. Math. Soc. Sc. Math. Roumanie, Thome 44(92), no.2** (2001), pag. 183 – 191

6. K. Fallahi, K. Nourouzi, Modular locally constant mappings in vector ultrametric spaces, **Abstract and Applied Analysis, 2011** (2011), pag. 1– 8
Citeaza: M. Vâjâitu, A. Zaharescu, *Metric locally constant functions*, **Acta et Commentationes Universitatis Tartuensis de Mathematica, vol.6** (2002), pag. 29 – 36

7. N. C. Bonciocat, From prime numbers to irreducible multivariate polynomials, **Analele Stiintifice ale Universitatii "Ovidus" Constanta, 19(2)**(2011), pag. 37–54.
Citeaza: M. Cavachi, M. Vâjâitu, A. Zaharescu, *An irreducibility criterion for polynomials in several variables*, **Acta Math. Univ. Ostrav. 12** (2004), pag. 13 – 18.

Vilcu Costin

1. J. Rouyer, As many antipodes as vertices on some convex polyhedra, **Adv. Geom. 7** (2011), pag. ... – ...
Citeaza: C. Vîlcu, *On two conjectures of Steinhaus*, **Geom. Dedicata 79** (2000), pag. 267–275

2. J. Rouyer, As many antipodes as vertices on some convex polyhedra, **Adv. Geom. 7** (2011), pag. ... – ...
Citeaza: C. Vîlcu, T. Zamfirescu *Symmetry and the farthest point mapping on convex surfaces*,**Adv. Geom. 6** (2006), pag. 379–387

Zaharescu Alexandru

1. S. K. Khanduja, R. Khassa, On invariants and strict systems of irreducible polynomials over Henselian valued fields, **Comm. Algebra 39** (2011), pag. 584 – 593.
Citeaza: N. Popescu, A. Zaharescu, *On the structure of the irreducible polynomials over local fields*, **J. Number Theory 52** (1995), pag. 98 – 118.

2. D. A. Badziahin, A. K. Haynes, A note on Farey fractions with denominators in arithmetic progressions, **Acta Arith. 147** (2011), pag. 205 – 215.
Citeaza: E. Alkan, A. H. Ledoan, M. Vâjâitu, A. Zaharescu, *Discrepancy of fractions with divisibility constraints*, **Monatsh. Math. 149** (2006), pag. 179 – 192.

3. D. A. Badziahin, A. K. Haynes, A note on Farey fractions with denominators in arithmetic progressions, **Acta Arith. 147** (2011), pag. 205 – 215.
Citeaza: E. Alkan, A. H. Ledoan, M. Vâjâitu, A. Zaharescu, *Discrepancy of sets of fractions with congruence constraints*, **Rev. Roumaine Math. Pures Appl. 51** (2006), pag. 265 – 276.

4. D. A. Badziahin, A. K. Haynes, A note on Farey fractions with denominators in arithmetic progressions, **Acta Arith. 147** (2011), pag. 205 – 215.
Citeaza: F. P. Boca, C. Cobeli, and A. Zaharescu, *A conjecture of R. R. Hall on Farey points*, **J. Reine Angew. Math. 535** (2001), pag. 207 – 236.

5. D. A. Badziahin, A. K. Haynes, A note on Farey fractions with denominators in arithmetic progressions, **Acta Arith. 147** (2011), pag. 205 – 215.
Citeaza: F. P. Boca, R. N. Gologan, and A. Zaharescu, *The average length of a trajectory in a certain billiard in a flat two-torus*, **New York J. Math. 9** (2003), pag. 303 – 330.

6. D. A. Badziahin, A. K. Haynes, A note on Farey fractions with denominators in arithmetic progressions, **Acta Arith. 147** (2011), pag. 205 – 215.
Citeaza: F. P. Boca, R. N. Gologan, and A. Zaharescu, *On the index of Farey sequences*, **Q. J. Math. 53** (2002), pag. 377 – 391.

7. S. K. Khanduja, R. Khassa, A generalization of Eisenstein-Schonemann irreducibility criterion, **Manuscripta Math. 134** (2011), pag. 215 – 224
Citeaza: V. Alexandru, N. Popescu, A. Zaharescu, *A theorem of characterization of residual transcendental extensions of a valuation*, **J. Math. Kyoto Univ. 28** (1988), pag. 579 – 592.

8. Z. W. Sun, W. Zhang, Binomial coefficients and the ring of p-adic integers, **Proc. Amer. Math. Soc. 139** (2011), pag. 1569 - 1577.
Citeaza: C. Cobeli, M. Vâjâitu, A. Zaharescu, *The sequence n! (mod p)*, **J. Ramanujan Math. Soc. 15** (2000), pag. 135 – 154.

9. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, A. Zaharescu, *Nonvanishing of Fourier coefficients of newforms in progressions*, **Acta Arith. 116** (2005), pag. 81 – 98.

10. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, A. Zaharescu, *Nonvanishing of the Ramanujan tau function in short intervals*, **Int. J. Number Theory 1** (2005), pag. 45 – 51.

11. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, A. Zaharescu, *Consecutive large gaps in sequences defined by multiplicative constraints*, **Can. Math. Bull. 51** (2008), pag. 172 – 181.

12. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, A. Zaharescu, *On the gaps in the Fourier expansion of cusp forms*, **Ramanujan J. 16** (2008), pag. 41 – 52.

13. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, M. Xiong, A. Zaharescu, *Arithmetic mean of differences of Dedekind sums*, **Monatsh. Math. 151** (2007), pag. 175 – 187.

14. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, M. Xiong, A. Zaharescu, *Quotients of values of the Dedekind eta function*, **Math. Ann. 342** (2008), pag. 157 – 176.

15. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: E. Alkan, M. Xiong, A. Zaharescu, *A bias phenomenon on the behavior of Dedekind sums*, **Math. Res. Lett. 15** (2008), pag. 1039 - 1052.

16. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: M. Beck, B. C. Berndt, O. Y. Chan, A. Zaharescu, *Determinations of analogues of Gauss sums and other trigonometric sums*, **Int. J. Number Theory 1** (2005), pag. 333 - 356.

17. E. Alkan, On Dirichlet L-functions with periodic coefficients and Eisenstein series, **Monatsh. Math. 163** (2011), pag. 249 – 280.
Citeaza: B. C. Berndt, A. Zaharescu, *Finite trigonometric sums and class numbers*, **Math. Ann. 330** (2004), pag. 551 - 575.

18. S. Neshveyev, von Neumann algebras arising from Bost-Connes type systems, **Int. Math. Res. Not. IMRN** (2011), pag. 217 - 236.
Citeaza: F. P. Boca, A. Zaharescu, *Factors of type III and the distribution of prime numbers*, **Proc. London Math. Soc. (3) 80** (2000), pag. 145 - 178.

Zamfirescu Tudor

1. M. Abbas, G. V. R. Babu, G. N. Alemayehu, *On common fixed points of weakly compatible mappings satisfying 'generalized condition (B)'*, **Filomat 25** (2011). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

2. L. Ciric, M. Abbas, R. Saadati, N. Hussain, *Common fixed points of almost generalized contractive mappings in ordered metric spaces*, **Appl. Math. Comput. 217** (2011). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

3. W. Sintunavarat, P. Kumam, *Weak condition for generalized multi-valued (f, alpha, beta)-weak contraction mappings*, **Appl. Math. Lett. 24** (2011). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

4. D. Ariza-Ruiz, A. Jimenez-Melado, G. Lopez-Acedo, *A fixed point theorem for weakly Zamfirescu mappings*, **Nonlinear Analysis – Theory, Methods & Appl. 74** (2011). *Citează*: T. Zamfirescu, *Fix point theorems in metric spaces*, **Arch. Math. 23** (1972), pag. 292 – 298.

5. J. P. Moreno, *Porosity and unique completion in strictly convex spaces*, **Math. Z. 267**, 1-2 (2011). *Citează*: T. Zamfirescu, *Porosity in Convexity*, **Real Analysis Exch. 15** (1989/90) 424-436.

6. R. Espínola, C. Li, G. López, *Nearest and farthest points in spaces of curvature bounded below*, **J. Approx. Theory 162** (2010) pp. 1365, 1380. *Citează*: T. Zamfirescu, *Nearly all convex bodies are smooth and strictly convex*

7. F. S. De Blasi, T. Hu, J.-C. Huang, *Generic Tychonov well-posedness in spaces of convex sets*, **Bull. Math. Soc. Sci. Math. Roumanie 54** (2011). *Citează*: T. Zamfirescu, *Baire categories in Convexity*, **Atti Sem. Mat. Fis. Univ. Modena 39** (1991) 139-164

8. J. Ferte, V. Pilaud, M. Pocchiola, *On the Number of Simple Arrangements of Five Double Pseudolines*, **Discrete Comput. Geom. 45**, 2 (2011). *Citează*: J. Goodman, R. Pollack, R. Wenger, T. Zamfirescu, *Arrangements and topological planes*, **Am. Math. Mon. 101** (1994) 866-878

9. B. Schmidt, *Spherical points in Riemannian manifolds*, **Proc. Amer. Math. Soc. 139** (2011). *Citează*: T. Zamfirescu, *On some questions about convex surfaces*, **Math. Nachr. 172** (1995) 313-324.

10. U. Bäsel, *Buffon's problem with a cluster of line segments and a lattice of parallelograms*, **Math. Communications 16** (2011). *Citează*: A. Aleman, M. Stoka, T. Zamfirescu, *Convex bodies instead of needles in Buffon's experiment*, **Geom. Dedicata 67** (1997) 301-308.

11. H. Maehara, *On a proper acute triangulation of a polyhedral surface*, **Discrete Math. 311** (2011) pp. 1903, 1909. *Citează*: Th. Hangan, J. Itoh, T. Zamfirescu, *Acute triangulations*, **Bull. Math. Soc. Sc. Math. Roumanie 43**, 3-4 (2000) 279-286.

12. H. Maehara, *On a proper acute triangulation of a polyhedral surface*, **Discrete Math. 311** (2011) pp. 1903, 1909. *Citează*: T. Zamfirescu, *Acute triangulations: a short survey*, **Proc. 6th Annual Conference Romanian Soc. Math. Sciences I** (2002) 10-18.

13. H. Maehara, *On a proper acute triangulation of a polyhedral surface*, **Discrete Math. 311** (2011) pp. 1903, 1909. *Citează*: J. Itoh, T. Zamfirescu, *Acute triangulations of the regular icosahedral surface*, **Discrete Comput. Geom. 31** (2004) 197-206.

14. J. P. Moreno, *Porosity and unique completion in strictly convex spaces*, **Math. Z. 267**, 1-2 (2011). *Citează*: T. Zamfirescu, *On the cut locus in Alexandrov spaces and applications to convex surfaces*, **Pacific J. Math. 217** (2004) 375-386.

15. J. Rataj, L. Zajicek, *Properties of distance functions on convex surfaces and applications*, **Czechoslovak Math. J. 61**, 1 (2011). *Citează*: T. Zamfirescu, *On the cut locus in Alexandrov spaces and applications to convex surfaces*, **Pacific J. Math. 217** (2004) 375-386.

16. J. P. Revalski, N. V. Zhivkov, *Small sets in best approximation theory*, **J. Global Optim. 50**, 1 (2011). *Citează*: T. Zamfirescu, *On the cut locus in Alexandrov spaces and applications to convex surfaces*, **Pacific J. Math. 217** (2004) 375-386.

17. F. S. De Blasi, T. Hu, J.-C. Huang, *Generic Tychonov well-posedness in spaces of convex sets*, **Bull. Math. Soc. Sci. Math. Roumanie 54** (2011). *Citează*: T. Zamfirescu, *The strange aspect of most compacta*, **J. Math. Soc. Japan 57**, 3 (2005) 701-708.

18. H. Maehara, N. Tokushige, *Classification of the Congruent Embeddings of a Tetrahedron into a Triangular Prism*, **Graphs Comb. 27**, 3 (Proc. of the Japan Conference on Computational Geometry and Graphs (JCCGG2009) (2011). *Citează*: J. Itoh, Y. Tanoue, T. Zamfirescu, *Tetrahedra passing through a circular or square hole*, **Rend. Circ. Mat. Palermo Suppl.** 77 (2006) 349-354.

19. H. Maehara, *On a proper acute triangulation of a polyhedral surface*, **Discrete Math. 311** (2011) pp. 1903, 1909. *Citează*: J. Itoh, T. Zamfirescu, *Acute triangulations of the regular dodecahedral surface*, **Eur. J. Comb. 28** (2007) 1072-1086.

20. J. W. Barrett, E. Sueli, *Finite Element Approximation of Kinetic Dilute Polymer Models with Microscopic Cut-Off*, **ESAIM-Math. Modell. Numer. Anal. 45** (2011). *Citează*: J. Itoh, T. Zamfirescu, *Acute triangulations of the regular dodecahedral surface*, **Eur. J. Comb. 28** (2007) 1072-1086.

21. G. Wiener and M. Araya, *On planar hypohamiltonian graphs*, **J. Graph Theory 67**, 1 (2011). *Citează*: C.T. Zamfirescu, T. Zamfirescu, *A planar hypohamiltonian graph on 48 vertices*, **J. Graph Theory 55**, 4 (2007) 338-342.

22. M. Araya and G. Wiener, *On cubic planar hypohamiltonian and hypotraceable graphs*, **Electron. J. Comb. 18**, 1, # P85 (2011). *Citează*: C.T. Zamfirescu, T. Zamfirescu, *A planar hypohamiltonian graph on 48 vertices*, **J. Graph Theory 55**, 4 (2007) 338-342.

23. J. P. Moreno, A. Seeger, *Visibility and diameter maximization of convex bodies*, **Forum Mathematicum 23**, 1 (2011). *Citează*: T. Zamfirescu, *Antipodal trees and mutually critical points on surfaces*, **Adv. Geom. 7** (2007) 385-390.

24. J. P. Moreno, A. Seeger, *Visibility and diameter maximization of convex bodies*, **Forum Mathematicum 23**, 1 (2011). *Citează*: T. Zamfirescu, *Viewing and realizing diameters*, **J. Geom. 88**, 1-2 (2008) 194-199.

6.2 Citari aparute in alte publicatii

Albu Toma

1. P. Mihailescu, *Leopoldt's Conjecture for CM fields Theory*, **arXiv: 1105.4544v2 [math.NT]**, 9 June 2011, 27 pagini.
   Citeaza: T. Albu, "*Cogalois Theory*", **A Series of Monographs and Textbooks, Vol. 252**, Marcel Dekker, Inc., New York and Basel (2003), 368 pagini.

2. T. Hanke, *A direct approach to noncrossed product division algebras*, **arXiv: 1109.1580v1 [math.RA]**, 7 Sep 2011, 64 pagini.
   Citeaza: T. Albu, F. Nicolae, *Kneser field extensions with Cogalois correspondence*, **J. Number Theory 52** (1995), pag. 299 – 318
   Citeaza: T. Albu, F. Nicolae, *G–Cogalois field extensions and primitive elements*, in **"Symposia Gaussiana", Conference A: Mathematics and Theoretical Physics,**

edited by M. Behara, R. Fritsch, R. G. Lintz, Walter de Gruyter & Co., Berlin New York (1995), pag. 233-240.

3. A. Perucca, *The intersection of cyclic Kummer extensions with cyclotomic extensions*, **arXiv: 1107.4595v3 [math.NT]**, 2 Nov 2011, 20 pagini.
Citeaza: T. Albu, "*Cogalois Theory*", **A Series of Monographs and Textbooks, Vol. 252, Marcel Dekker, Inc., New York and Basel**, 2003, 368 pagini.

Ambro Florin

1. Fujino, Osamu, Introduction to the theory of quasi-log varieties, **Classification of algebraic varieties. Based on the conference on classification of varieties, Schiermonnikoog, Netherlands, May 2009. EMS Series of Congress Reports** (2011), pag. 289 – 303
Citeaza: Ambro Florin, *Quasi-log varieties*, **Proc. Steklov Inst. Math. Vol 240 (1)** (2003), pag. 214 – 233

Aprodu Marian

1. Frank-Olaf Schreyer, Computer aided Unirationality Proofs of Moduli Spaces, **arXiv:1109.4600** (2011) va apare în **Handbook of Moduli**
Citeaza: Marian Aprodu, Gavril Farkas, *Koszul cohomology and applications to moduli*, **Grassmannians, Moduli Spaces and Vector Bundles**, editori: David A. Ellwood, Clay Mathematics Institute, Cambridge, MA, Emma Previato, Boston University, MA, AMS, Clay Mathematics Proccedings vol. 14 (2011), pag. 25 – 50, ISBN-10: 0-8218-5205-1, ISBN-13: 978-0-8218-5205-7

2. Lawrence Ein, Rob Lazarsfeld, Asymptotic syzygies of algebraic varieties, **arXiv:1103.0483** (2011)
Citeaza: Marian Aprodu, Claire Voisin, *Green-Lazarsfeld's conjecture for generic curves of large gonality*, **C. R. Math. Acad. Sci. Paris 336-4** (2003), pag. 335 – 339

3. Lawrence Ein, Rob Lazarsfeld, Asymptotic syzygies of algebraic varieties, **arXiv:1103.0483** (2011)
Citeaza: Marian Aprodu, *GreenLazarsfeld gonality conjecture for a generic curve of odd genus*, **Int. Math. Res. Not. 63** (2004), pag. 3409 – 3416

4. Gavril Farkas, Angela Ortega, Higher rank Brill-Noether theory on sections of K3 surfaces, **arXiv:1102.0276** (2011)
Citeaza: Marian Aprodu, Jan Nagel, *Non-vanishing for Koszul cohomology of curves*, **Comment. Math. Helvetici 82** (2007), pag. 617 – 628

5. Emre Coskun, Rajesh S. Kulkarni, Yusuf Mustopa, Pfaffian quartic surfaces and representations of Clifford algebras, **arXiv:1107.1522** (2011)
Citeaza: Marian Aprodu, Gavril Farkas, *Green's Conjecture for curves on arbitrary K3 surfaces*, **Compositio Math. 147** (2011), pag. 839 – 851

6. Marco Franciosi, The canonical ring of a 3-connected curve, **arXiv:1107.5535** (2011)
Citeaza: Marian Aprodu, Gavril Farkas, *Koszul cohomology and applications to moduli*, **Grassmannians, Moduli Spaces and Vector Bundles**, editori: David A. Ellwood,

Clay Mathematics Institute, Cambridge, MA, Emma Previato, Boston University, MA, AMS, Clay Mathematics Proccedings vol. 14 (2011), pag. 25 – 50, ISBN-10: 0-8218-5205-1, ISBN-13: 978-0-8218-5205-7

7. Jie Wang, On the Generic vanishing of certain Koszul cohomology groups, **arXiv:1108.4714v2** (2011)
   Citeaza: Marian Aprodu, Gavril Farkas, *Green's Conjecture for curves on arbitrary K3 surfaces*, **Compositio Math. 147** (2011), pag. 839 – 851

8. Jie Wang, On the Generic vanishing of certain Koszul cohomology groups, **arXiv:1108.4714v2** (2011)
   Citeaza: Marian Aprodu, Jan Nagel, *Koszul Cohomology and Algebraic Geometry*, **University Lecture Series AMS, 52** (2010)

Badea Lori

1. M.-B. Tran, Convergence Properties of Overlapping Schwarz Domain Decomposition Algorithms, **arXiv:1104.4294v1 [math.NA]**, 2011.
   Citeaza: L. Badea, On the Schwarz alternating method with more then two subdomains for nonlinear monotone problems, **SIAM J. Numer. Anal., 28**, 1, 1991, pag. 179-204.

2. C. Gräser, Convex Minimization and Phase Field Models, **PhD thesis**, Free University of Berlin, 2011.
   Citeaza: L. Badea, X.-C. Tai and J. Wang, Convergence rate analysis of a multiplicative Schwarz method for variational inequalities, **SIAM J. Numer. Anal, 41**, 3, 2003, pp. 1052-1073.

3. C. Gräser, Convex Minimization and Phase Field Models, **PhD thesis**, Free University of Berlin, 2011.
   Citeaza: L. Badea, Convergence rate of a Schwarz multilevel method for the constrained minimization of nonquadratic functionals, **SIAM J. Numer. Anal., 44**, 2, 2006, pag. 449-477.

4. O. OReilly, Coupled High-Order Finite Difference and Unstructured Finite Volume Methods for Earthquake. Rupture Dynamics in Complex Geometries, **preprint**, University of Uppsala, 2011.
   Citeaza: L. Badea, I. R. Ionescu and S. Wolf, Schwarz method for earthquake source dynamics, **Journal of Computational Physics, 8**, 2008, pag. 3824-3848.

5. Y. Cao, M. Gunzburger, X. He and X. Wang, Parallel, non-iterative, multi-physics, domain decomposition methods for the time-dependedt Stokes-Darcy model, **technical report**, 2011.
   Citeaza: L. Badea, M. Discacciati and A. Quarteroni, Mathematical analysis of the Navier-Stokes/Darcy coupling, **Numer. Math., 115**, 2, pag. 195227, 2010.

Beltita Daniel

1. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag.

417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, *Spectra for solvable Lie algebras of bundle endomorphisms*, **Math. Ann. 324** (2002), no. 2, 405–429.

2. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, *Integrability of analytic almost complex structures on Banach manifolds*, **Ann. Global Anal. Geom. 28** (2005), no. 1, 59–73.

3. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, *Smooth homogeneous structures in operator theory*, **Chapman & Hall/CRC Monographs and Surveys in Pure and Applied Mathematics, 137**, Chapman & Hall/CRC, Boca Raton, FL, 2006.

4. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, J.E. Galé, *Holomorphic geometric models for representations of C^*-algebras*, **J. Funct. Anal. 255** (2008), no. 10, 2888–2932.

5. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, B. Prunaru, *Amenability, completely bounded projections, dynamical systems and smooth orbits*, **Integral Equations Operator Theory 57** (2007), no. 1, 1–17.

6. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, T.S. Ratiu, *Symplectic leaves in real Banach Lie-Poisson spaces*, **Geom. Funct. Anal. 15** (2005), no. 4, 753–779.

7. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H. Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, T.S. Ratiu, *Geometric representation theory for unitary groups of operator algebras*, **Adv. Math. 208** (2007), no. 1, 299–317.

8. T.S. Ratiu, *Coadjoint orbits and the beginnings of a geometric representation theory*, in: **Developments and Trends in Infinite-Dimensional Lie Theory**, editori: K.-H.

Neeb şi A. Pianzola, Progress in Mathematics 288, Birkhäuser Verlag, Basel (2011), pag. 417–457 (ISBN: 978-0-8176-4740-7)
Citează: D. Beltiţă, T.S. Ratiu, A.B. Tumpach, *The restricted Grassmannian, Banach Lie-Poisson spaces, and coadjoint orbits*, **J. Funct. Anal. 247** (2007), no. 1, 138–168.

Beltita Ingrid

1. R. Lagergren, *The back-scattering problem in three dimensions*, **J. Pseudo-Diff. Operators Appl. 2** (2011), pag. 1–64 *Citează*: I. Belitiţă, A. Melin, *Analysis of the quadratic term in the backscattering transform.* **Math. Scand. 105** (2009), pag. 218–234.

2. R. Lagergren, *The back-scattering problem in three dimensions*, **J. Pseudo-Diff. Operators Appl. 2** (2011), pag. 1–64 *Citează*: I. Beltiţă, A. Melin, *Local smoothing for the backscattering transform.* **Comm. Partial Differ. Equ. 34** (2009), pag. 233–256.

Boca Florin-Petre

1. F. Cellarosi, Ya. G. Sinai, The Möbius function and statistical mechanics, **Bulletin of Mathematical Sciences 1** (2011) DOI 10.1007/S13373-011-0011-6
Citeaza: F. P. Boca, C. Cobeli, A. Zaharescu, *Distribution of lattice points visible from the origin*, **Comm. Math. Phys. 213** (2000), pag. 433–470.

Bonciocat Anca Iuliana

1. J. Jost, S. Liu: *Ollivier's Ricci curvature, local clustering and curvature dimension inequalities on graphs*, preprint arXiv:1103.4037 (2011)
Citeaza: A. I. Bonciocat, K. T. Sturm, *Mass transportation and rough curvature bounds for discrete spaces*, **J. Funct. Anal. 256, no. 9** (2009), pag. 2944 – 2966.

2. F. Bauer, J. Jost, S. Liu: *Ollivier-Ricci curvature and the spectrum of the normalized graph Laplace operator*, preprint no. 25 **Max-Planck-Institut für Mathematik in den Naturwissenschaften Leipzig** (2011)
Citeaza: A. I. Bonciocat, K. T. Sturm, *Mass transportation and rough curvature bounds for discrete spaces*, **J. Funct. Anal. 256, no. 9** (2009), pag. 2944 – 2966.

3. S.-N Chow, W. Huang, Y. Li, Haomin Zhou: *Fokker-Planck equations for a free energy functional or Markov process on a graph*, preprint math.ucla.edu (2011)
Citeaza: A. I. Bonciocat, K. T. Sturm, *Mass transportation and rough curvature bounds for discrete spaces*, **J. Funct. Anal. 256, no. 9** (2009), pag. 2944 – 2966.

4. E. Saucan: *A simple sampling method for metric measure spaces*, preprint arXiv:1002.0007 (2011)
Citeaza: A. I. Bonciocat, K. T. Sturm, *Mass transportation and rough curvature bounds for discrete spaces*, **J. Funct. Anal. 256, no. 9** (2009), pag. 2944 – 2966.

5. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *Some classes of irreducible polynomials*, **Acta Arith. 123** (2006) no. 4, 349 - 360.

6. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr. 281** (2008) no. 9, 1240 - 1253.

7. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull. 52** (2009) no. 4, 511 - 520.

8. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie vol. 54 (102)** (2011).

9. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, A. Zaharescu, *Irreducibility results for compositions of polynomials in several variables*, **Proc. Indian Acad. Sci. (Math. Sci.) 115** (2005) no. 2, pag. 117 - 126.

Bonciocat Nicolae Ciprian

1. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *Some classes of irreducible polynomials*, **Acta Arith. 123** (2006) no. 4, 349 - 360.

2. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr. 281** (2008) no. 9, 1240 - 1253.

3. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull. 52** (2009) no. 4, 511 - 520.

4. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: A.I. Bonciocat, N.C. Bonciocat, A. Zaharescu, *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie vol. 54 (102)** (2011).

5. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53

Citeaza: N.C. Bonciocat, *On an irreducibility criterion of Perron for multivariate polynomials*, **Bull. Math. Soc. Sci. Math. Roumanie 53 (101)** (2010), no. 3, pag. 213 - 217.

6. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: N.C. Bonciocat, A. Zaharescu, *Irreducible multivariate polynomials obtained from polynomials in fewer variables*, **J. Pure Appl. Algebra 212** (2008), 2338 - 2343.

7. N.C. Bonciocat: *From prime numbers to irreducible multivariate polynomials*, **An. Stiint. Univ. "Ovidius" Constanta Ser. Mat. 19** (2011) no. 2, pag. 37 – 53
Citeaza: N.C. Bonciocat, A. Zaharescu, *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci. 121** (2011) no. 2, pag. 133 – 141.

Burciu Sebastian

1. S. Natale, Faithful simple objects, orders and gradings of fusion categories ,
arXiv:1110.1686 volum (2011), pag. ... – ...
Citeaza: S. Burciu: *Kernels of representations and coideal subalgebras of Hopf algebras*, **Glasgow Mathematical Journal to appear** (2011), pag. ... – ...

2. Jurgen Fuchs, Christoph Schweigert, Carl Stigner, **Modular invariant Frobenius algebras from ribbon Hopf algebra automorphisms arXiv:1106.0210** (2011), pag. ... – ...
Citeaza: S. Burciu, *A class of Drinfeld doubles that are ribbon algebras*, **J. Algebra 320** (2008), pag. 2053 – 2078

Calinescu Corina

1. M. Jerkovic, M. Primc, Quasi-Particle Fermionic Formulas for (k,3)-admissible configurations, arXiv: 1107.3900
Citeaza: C. Calinescu, J. Lepowsky, A. Milas,
Vertex-algebraic structure of the principal subspaces of level one modules for the untwisted affine Lie algebras of types A,D,E, **J. Algebra 323** (2010), pag. 167-192.
Vertex-algebraic structure of the principal subspaces of certain A(1) 1 -modules, II: higher-level case **J. Pure Appl. Algebra 212** (2008), 19281950.
Citeaza: C. Calinescu
Intertwining vertex operators and certain representations of sl(n)
Commun. Contemp. Math. 10 (2008), 4779.

Capatina Anca

1. N. Auffray, M. Bonnet, S. Pagano, Identification de sources de chaleurs dans le contexte de la thermographie infrarouge, **Actes du X-éme Colloque National en Calcul des Structures 9-13 May, Presqu'ile de Giens** (2011) *Citează*: A. Capatina, R. Stavre, *Algorithmes and convergence results for an inverse problem*, **Int. J. Engng. Sci 38, 5** (2000), pag. 575-585

Chiriacescu Gabriel

1. Khashyarmanesh, Kazem; Fahimeh Kosh-Ahang Ghasr: On the Extension and Torsion Functors of Local Cohomology of Weakly Laskerian and Reflexive Modules, **Studia Universitatis Babes-Bolyai, LVI,(1)**, (2011), pag. 15-26
Citeaza: G. Chiriacescu, *Cofiniteness of local cohomology modules over regular local rings*, **Bull. London Math. Soc., 32**, (2000), pag. 1–7

Cipu Mihai

1. B. He, A. Togbă'e, G. Walsh, *On the size of the intersection of two Lucas sequences of distinct type*, Annales Sci. Math. Québec **35** (2011), 31–61
Citează: M. Cipu, M. Bennett, M. Mignotte, R. Okazaki, *On the number of solutions of simultaneous Pell equations, II*, **Acta Arith., 122** (2006), 407–417

2. B. He, A. Togbă'e, G. Walsh, *On the size of the intersection of two Lucas sequences of distinct type*, Annales Sci. Math. Québec **35** (2011), 31–61
Citează: M. Cipu, M. Mignotte, *On the number of solutions to systems of Pell equations*, **J. Number Theory 125** (2007), 356–392

3. T. Miyazaki, Terai's conjecture on exponential Diophantine equations, **Internat. J. Number Th., 7** (2011), 981–999
Citează: M. Cipu, M. Mignotte, *On a conjecture on exponential Diophantine equations*, **Acta Arith.,140** (2009), 251–270

Cobeli Cristian

1. De Scott B. Guthery, *A Motif of Mathematics*, Docent Press (2011), pag. 264; ISBN-13: 9781453810576, ISBN-10: 1453810579
Citeaza: Cobeli, Cristian; Zaharescu, Alexandru, *The Haros-Farey sequence at two hundred years*, **Acta Univ. Apulensis Math. Inform. 5,** (2003), pag. 1–38.

Dan Nicusor

1. José Ignacio Burgos Gil, Patrice Philippon, Martin Sombra, *Arithmetic geometry of toric varieties. Metrics, measures and heights*, **arXiv**:1105.5584 [math.AG]
Citeaza: Nicusor Dan, *La hauteur des quadriques*, **C. R. Acad. Sci. Paris, Ser. I 324 (1997)**, pag. 1323-1326

Diaconescu Razvan

1. M. Codescu, T. Mossakowski, A. Riesco, C. Maeder: *Integrating Maude into Hets*, **Lecture Notes in Computer Science 6486** (2011) pag.60–75.
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

2. M. Codescu, T. Mossakowski, A. Riesco, C. Maeder: *Integrating Maude into Hets*, **Lecture Notes in Computer Science 6486** (2011) pag.60–75.
Citează: R. Diaconescu, K. Futatsugi: **CafeOBJ report: The Language, Proof Techniques, and Methodologies for Object-Oriented Algebraic Specification**, World Scientific (1998).

3. M. Martins, A. Madeira, R. Diaconescu, L. Barbosa: *Hybridization of Institutions*, **Lecture Notes in Computer Science 6859**, Algebra and Coalgebra in Computer Science, Winchester, England, editori: Andrea Corradini, Bartek Klin, Corina Cîrstea, Springer (2011), pag. 283–297 ISBN: 978-3-642-22943-5.
Citează: R. Diaconescu: *Elementary diagrams in institutions*, **J. Logic and Computation 14(5)**, (2004) pag. 651–674.

4. M. Martins, A. Madeira, R. Diaconescu, L. Barbosa: *Hybridization of Institutions*, **Lecture Notes in Computer Science 6859**, Algebra and Coalgebra in Computer Science, Winchester, England, editori: Andrea Corradini, Bartek Klin, Corina Cîrstea, Springer (2011), pag. 283–297 ISBN: 978-3-642-22943-5.
Citează: R. Diaconescu: **Institution-independent Model Theory**, Birkhäuser (2008).

5. M. Martins, A. Madeira, R. Diaconescu, L. Barbosa: *Hybridization of Institutions*, **Lecture Notes in Computer Science 6859**, Algebra and Coalgebra in Computer Science, Winchester, England, editori: Andrea Corradini, Bartek Klin, Corina Cîrstea, Springer (2011), pag. 283–297 ISBN: 978-3-642-22943-5.
Citează: R. Diaconescu, P. Stefaneas: *Ultraproducts and possible worlds semantics in institutions*, **Theoretical Computer Science 379(1)** (2007) pag. 210–230.

6. M. Martins, A. Madeira, R. Diaconescu, L. Barbosa: *Hybridization of Institutions*, **Lecture Notes in Computer Science 6859**, Algebra and Coalgebra in Computer Science, Winchester, England, editori: Andrea Corradini, Bartek Klin, Corina Cîrstea, Springer (2011), pag. 283–297 ISBN: 978-3-642-22943-5.
Citează: R. Diaconescu: *Quasi-Boolean encodings and conditionals in algebraic specification*, **Journal of Logic and Algebraic Programming 79(2)** (2010), pag. 174–188.

Dragan Vasile

1. Zhang Weihai; Chen Bor-Sen; Yan Zhiguo, FEEDBACK STABILIZATION FOR NONLINEAR AFFINE STOCHASTIC SYSTEMS, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL Volume: 7 Issue: 9**, (2011), 5363 – 5375
Citeaza: V.Dragan, T. Morozan, *Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise*, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

2. Huiying Sun; Luning Li; Liuyang Jiang;, Infinite-time linear quadratic differential games for stochastic system with Markov jumps and multiplicative noise, **Proceedings of Chinese Control and Decision Conference (CCDC), ISBN 978-1-4244-8737-0** (2011), 1728 - 1732
Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

3. Liu, Xiaona; Wu, Ai-Guo; Duan, Guang-Ren, $L_2 - L_\infty$ analysis and control to Markov jump systems with multiplicative noise, **Proceedings of 30th Chinese Control Conference (CCC), ISBN 978-1-4577-0677-6** (2011), 1413 - 1418

Stability and robust stabilization to linear stochastic systems described by differential equations with Markovian jumping and multiplicative white noise, **Stochastic Analysis and Applications, 20, (1)**, (2002), pag. 33-92.

4. Mehdi Ghasem Moghadam, Mohammad Taghi Hamidi Beheshti, On Output Feedback Multiobjective Control for Singularly Perturbed Systems, **Mathematical Problems in Engineering, Volume 2011** (2011), 28 pages, doi:10.1155/2011/903126
   Citeaza Peng Shi; Dragan, V., *Asymptotic H_∞ control of singularly perturbed systems with parametric uncertainties*, **IEEE Trans. on Automatic Control, 44, 9** (1999), pag. 1738–1742.

5. Kong, S.; Saif, M.; Huanshui Zhang;, Optimal filtering for It-Stochastic continuous-time systems with multiple delayed measurements, **Proceedings of American Control Conference (ACC),ISBN:978-1-4577-0080-4** (2011), 4867–4871
   Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

6. autori si revista scrise in limba chineza , indescifrabil, **vol 131, 3** (2011), 644–654
   Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

7. S. Sathananthan, M.J. Knap, L.H. Keel, Guaranteed Cost H? Control of Linear Stochastic Markovian Switching Systems, **Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2,** (2011), 5459 –5464
   Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

8. S. Aberkane, Reconfigurable Control Systems: A Nonhomogeneous Markovian Jump System Approach **Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2,** (2011), 5425 –5429
   Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

9. Hongji Ma, Weihai Zhang , Ting Hou, Infinite Horizon H2/Hinftinity Control for Discrete-Time Time-Varying Markov Jump Systems with Multiplicative Noise, **Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2,** (2011), 5425 –5429
   Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

10. Chu, E.K.; Tiexiang Li; Wen-Wei Lin; Chang-Yi Weng, A modified Newton's method for rational Riccati equations arising in stochastic control, **Proceedings of International Conference on Communications, Computing and Control Applications (CCCA)**, (2011), 1–6
Citeaza: V. Dragan, T. Morozan, A.M. Stoica, MATHEMATICAL METHODS IN ROBUST CONTROL OF LINEAR STOCHASTIC SYSTEMS, **Mathematical Concepts and Methods in Science and Engineering, Series Editor: Angelo Miele, Volume 50, Springer Science+Business Media LLC,** (2006), carte.

11. Lin Xiangyun; Zhang Rui, H_∞ control for stochastic systems with Poisson jumps, **JOURNAL OF SYSTEMS SCIENCE and COMPLEXITY, 24, 4** (2011), 683 –700
Citeaza: Dragan V.; Morozan T., *Global solutions to a game-theoretic Riccati equation of stochastic control*, **J. Differential Equations, 138** (1997), pag. 328–350.

12. De Jesus Rubio Jose; Torres Cesar; Aguilar Carlos, Optimal control based in a mathematical model applied to robotic arms, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 7, 8** (2011), 5045–5062
Citeaza: Dragan Vasile, *The linear quadratic optimization problem for a class of singularly perturbed stochastic systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 1, 1** (2005), pag. 53 –63.

13. Lin Xiangyun; Zhang Rui, H_∞ control for stochastic systems with Poisson jumps, **JOURNAL OF SYSTEMS SCIENCE and COMPLEXITY, 24, 4** (2011), 683 –700
Citeaza: Dragan V ; Halanay A ; Stoica A, *The gamma-attenuation problem for systems with state dependent noise*, **STOCHASTIC ANALYSIS AND APPLICATIONS, 17, 3** (1998), pag. 395 –404.

14. Liu Xiaona; Wu Ai-Guo; Duan Guang-Ren; L_2-L_∞ analysis and control to Markov jump systems with multiplicative noise, **Proceedings of 30th Chinese Control Conference (CCC), ISBN 978-1-4577-0677-6**, (2011), 1413–1418.
Citeaza: Dragan Vasile; Morozan Toader; Stoica Adrian, H^2 *optimal control for linear stochastic systems*, **Automatica J. IFAC, 40** (2004), pag. 1103–1113.

15. Sun Huiying; Jiang Liuyang; Linear-quadratic differential games for discrete-time stochastic systems with Markov jumps and multiplicative noise **Proceedings of 30th Chinese Control Conference (CCC), ISBN 978-1-4577-0677-6**, (2011), 2040–2043
Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problems for a class of linear stochastic systems with multiplicative white noise and Markovian jumping*, **IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 49, 5** (2004), pag. 665–675.

16. Wang, G.; Chen, Q.; Ren, Z., Modelling of time-varying discrete-time systems, **Signal Processing, IET, 5, 1**, (2011), 104 - 112
Citeaza: V.Dragan, T. Morozan, *Mean Square Exponential Stability for some Stochastic Linear Discrete Time Systems*, **European Journal of Control, 12, 4,** (2006), pag. 373 – 396.

17. Fatemeh Jamshidi, Afshin Shaabany, H_2/H_∞ Controller design for singularly perturbed systems, **Journal of American Science, 7, 3**, (2011), 493-499

Citeaza: V. Dragan, T. Morozan, *The linear quadratic optimization problem for a class of discrete-time stochastic linear systems*, **INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, 4, 9** (2008), pag. 2127–2137.

18. JUAN ZHANG, JIANZHOU LIU, NEW LOWER SOLUTION BOUNDS FOR THE CONTINUOUS ALGEBRAIC RICCATI EQUATION, **Journal of Linear Algebra, 22**, (2010), 191 – 202
Citeaza: V. Dragan, T. Morozan, *Discrete-time Riccati type equations and the tracking problem,*, **ICIC Express Letters, 2, 2,** (2008), pag. 109 – 116.

19. Alfredo R. R. Narvaez, Eduardo F. Costa, On the controllability of continuous-time Markov jump linear systems, **Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2,** (2011), 9103–9108
Citeaza: V. Dragan, T. Morozan, *Exponential stability in mean square for a general class of discrete-time linear stochastic systems,* **Stochastic Analysis and Applications, 26, 3** (2008), pag. 495 – 525.

20. Carlos A. Silva, Daiane C. Bortolin, Eduardo F. Costa, An algorithm for the long run average cost problem for linear systems with indirect observation of Markov jump parameters, **Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2,** (2011), 12668–12673
Citeaza: V. Dragan, T. Morozan, *Exponential stability in mean square for a general class of discrete-time linear stochastic systems,* , **Stochastic Analysis and Applications, 26, 3** (2008), pag. 495 – 525.

21. autori si titlul articolului in limba chineza, indescifrabil, **Chinese Journal of Applied Probability and Statistics Vol.27 No.1 Feb.** (2011) *Citeaza*: V. Dragan, T. Morozan, *Exponential stability in mean square for a general class of discrete-time linear stochastic systems,* , **Stochastic Analysis and Applications, 26, 3** (2008), pag. 495 – 525.

Ionescu Paltin

1. Y. Fukuma, A study on the dimension of global sections of adjoint bundles for polarized manifolds, II, **Hokkaido Math. J. 40** (2011), pag. 251–277
Citeaza: P. Ionescu, *Generalized adjunction and applications*, **Math. Proc. Cambridge Phil. Soc. 99** (1986), pag. 457–472

Ionescu Paul Cristodor

1. S, Morey, R. Villareal, Edge ideals: Algebraic and Combinatorial properties, **arxiv.org1012.5329v3**,
Citeaza: C. Ionescu, G. Rinaldo, *Some algebraic invariants of mixed products ideals*, **Arch. Math. 91** (2008), pag. 20 – 30.

Leustean Laurentiu

1. W. Phuengrattana, Approximating fixed points of Suzuki-generalized nonexpansive mappings, **Nonlinear Analysis: Hybrid Systems 5** (2011), 583–590
Citeaza: L. Leuştean, *A quadratic rate of asymptotic regularity in CAT(0)-spaces*, **Journal of Mathematical Analysis and Applications 325** (2007), 386–399.

Maxim Laurentiu

1. Laurentiu Maxim, On Milnor classes of complex hypersurfaces, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 161–175
   Citeaza: S. Cappell, L. Maxim, J. Shaneson, *Euler characteristics of algebraic varieties*, **Comm. Pure Appl. Math. 61** (2008), no. 3, pag. 409–421.

2. Greg Friedman, An introduction to intersection homology with general perversity functions, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 177–222
   Citeaza:S. Cappell, L. Maxim, J. Shaneson, *Hodge genera of algebraic varieties, I.*, **Comm. Pure Appl. Math. 61** (2008), no. 3, pag. 422–449.

3. Greg Friedman, An introduction to intersection homology with general perversity functions, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 177–222
   Citeaza: S. Cappell, A. Libgober, L. Maxim, J. Shaneson, *Hodge genera of algebraic varieties, II.*, **Math. Ann. 345** (2009), no. 4, pag. 925–972.

4. Shoji Yokura, Motivic characteristic classes, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 375–418
   Citeaza: S. Cappell, A. Libgober, L. Maxim, J. Shaneson, *Hodge genera and characteristic classes of complex algebraic varieties*, **Electron. Res. Announc. Math. Sci. 15** (2008), pag. 1–7.

5. Shoji Yokura, Motivic characteristic classes, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 375–418
   Citeaza:S. Cappell, L. Maxim, J. Shaneson, *Euler characteristics of algebraic varieties*, **Comm. Pure Appl. Math. 61** (2008), no. 3, pag. 409–421.

6. Shoji Yokura, Motivic characteristic classes, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 375–418
   Citeaza:S. Cappell, L. Maxim, J. Shaneson, *Hodge genera of algebraic varieties, I.*, **Comm. Pure Appl. Math. 61** (2008), no. 3, pag. 422–449.

7. Shoji Yokura, Motivic characteristic classes, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 375–418
   Citeaza: S. Cappell, A. Libgober, L. Maxim, J. Shaneson, *Hodge genera of algebraic varieties, II.*, **Math. Ann. 345** (2009), no. 4, pag. 925–972.

8. Shoji Yokura, Motivic characteristic classes, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 375–418
   Citeaza: S. Cappell, L. Maxim, J. Schürmann, J. Shaneson, *Characteristic classes of complex hypersurfaces*, **Adv. Math. 225** (2010), no. 5, pag. 2616–2647.

9. Shoji Yokura, Motivic characteristic classes, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 375–418
   Citeaza: L. Maxim, J. Schürmann, *Hodge-theoretic Atiyah-Meyer formulae and the stratified multiplicative property*, **Contemp. Math. 474** (2008), pag. 145-166.

10. Jörg Schürmann, Characteristic classes of mixed Hodge modules, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 419–470
Citeaza:S. Cappell, L. Maxim, J. Shaneson, *Euler characteristics of algebraic varieties*, **Comm. Pure Appl. Math. 61** (2008), no. 3, pag. 409–421.

11. Jörg Schürmann, Characteristic classes of mixed Hodge modules, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 419–470
Citeaza:S. Cappell, L. Maxim, J. Shaneson, *Hodge genera of algebraic varieties, I.*, **Comm. Pure Appl. Math. 61** (2008), no. 3, pag. 422–449.

12. Jörg Schürmann, Characteristic classes of mixed Hodge modules, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 419–470
Citeaza: S. Cappell, A. Libgober, L. Maxim, J. Shaneson, *Hodge genera and characteristic classes of complex algebraic varieties*, **Electron. Res. Announc. Math. Sci. 15** (2008), pag. 1–7.

13. Jörg Schürmann, Characteristic classes of mixed Hodge modules, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 419–470
Citeaza: S. Cappell, A. Libgober, L. Maxim, J. Shaneson, *Hodge genera of algebraic varieties, II.*, **Math. Ann. 345** (2009), no. 4, pag. 925–972.

14. Jörg Schürmann, Characteristic classes of mixed Hodge modules, **Mathematical Sciences Research Institute Publications 58** (2011), pag. 419–470
Citeaza: L. Maxim, J. Schürmann, *Hodge-theoretic Atiyah-Meyer formulae and the stratified multiplicative property*, **Contemp. Math. 474** (2008), pag. 145-166.

Nichita Felix Florin

1. Radu Iordanescu, Jordan structures in Mathematics and Physics, **arXiv:1106.4415v1 [math.DG]** (2011), pag. 1 – 171
Citeaza: Florin F. Nichita, Bogdan P. Popovici, *Yang-Baxter operators from (G, θ)-Lie algebras* , **Romanian Reports in Physics, Number 3, Vol. 63** (2011), pag. 641–650.

2. Angel Garrido, Classifying Fuzzy Numbers, **EIJ-AMO-Advanced Modeling and Optimization, Volume 13, Number 1** (2011), pag. 89–96. *Citeaza*: Florin F. Nichita.

Panaite Florin

1. R. Holtkamp, Rooted trees appearing in products and co-products, **Contemporary Math. 539** (2011), pag. 153 – 169
Citeaza: F. Panaite, *Relating the Connes-Kreimer and Grossman-Larson Hopf algebras built on rooted trees*, **Lett. Math. Phys 51(3)** (2000), pag. 211 – 219

Pantilie Radu

1. R. Slobodeanu, A note on higher-charge configurations for the Faddeev-Hopf model, **Harmonic maps and differential geometry, Contemporary Mathematics 542** (2011), pag. 239–246.
Citeaza: R. Pantilie, *On submersive harmonic morphisms*, **Chapman & Hall/CRC Research Notes in Mathematics Series 413** (2000), pag. 23–29.

2. R. C. Voicu, Ricci curvature properties and stability on 3-dimensional Kenmotsu manifolds, **Harmonic maps and differential geometry, Contemporary Mathematics 542** (2011), pag. 273–278.
Citeaza: R. Pantilie, *Submersive harmonic maps and morphisms*, **Editura Academiei Române** (2009).

Polisevschi Dan

1. A. Muntean, T.L. van Noorden, Corrector estimates for the homogenization of a locally-periodic medium with areas of low and high diffusivity, **arXiv:1104.0180v1 [math-ph], CASA-Report 11-29** (2011) 19 pages
Citeaza: H.I. Ene, D. Poliševki, *Model of diffusion in partially fissured media*, **J. Appl. Math. Phys. (ZAMP), 53(6)** (2002), 1052–1059

Pop Ciprian

1. Helemskii, A. Ya., *Quantum functional analysis: non-coordinate approach*, **University Lecture Series vol. 56**, American Mathematical Society, 2011. *Citeaza*:
Pop, Ciprian. *Bimodules normés représentables sur des espaces hilbertiens* **Operator theoretical methods (Timişoara, 1998)**,331–370.

2. Helemskii, A. Ya., *Quantum functional analysis: non-coordinate approach*, **University Lecture Series vol. 56**, American Mathematical Society, 2011. *Citeaza*:
Anantharaman-Delaroche, Claire; Pop, Ciprian. *Relative tensor products and infinite C^*-algebras*, **Journal of Operator Theory 47 (2002)**, no. 2, 389–412.

Radulescu Vicentiu

1. Ayoujil, Abdesslem; El Amrouss, Abdel Rachid Continuous spectrum of a fourth order nonhomogeneous elliptic equation with variable exponent, **Electron. J. Differential Equations 2011, No. 24** (2011), 12 pp.
Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc. 135** (2007), pag. 2929 – 2937.

2. Vétois, Jérôme Existence and regularity for critical anisotropic equations with critical directions, **Adv. Differential Equations 16** (2011), 61 – 83
Citeaza: M. Mihailescu, P. Pucci, V. Rădulescu, *Eigenvalue problems for anisotropic quasilinear elliptic equations with variable exponent*, **J. Math. Anal. Appl. 340** (2008), pag. 687 – 698.

3. Zhang, Zhijun; Shi, Yongxiu; Xue, Yanxing Existence of entire solutions for semilinear elliptic systems under the Keller-Osserman condition, **Electron. J. Differential Equations 2011, No. 39** (2011), 9 pp.
Citeaza: F. Cirstea, V. Rădulescu, *Blow-up boundary solutions of semilinear elliptic problems*, **Nonlinear Anal. 48** (2002), pag. 521 – 534.

4. Anedda, Claudia; Porru, Giovanni Second-order boundary estimates for solutions to singular elliptic equations in borderline cases, **Electron. J. Differential Equations 2011, No. 51** (2011), 19 pp.
Citeaza: M. Ghergu, V. Rădulescu, *On a class of sublinear singular elliptic problems with convection term*, **J. Math. Anal. Appl. 311** (2005), pag. 635 – 646.

5. Chung, Nguyen Thanh Existence of infinitely many solutions for degenerate and singular elliptic systems with indefinite concave nonlinearities, **Electron. J. Differential Equations 2010, No. 30** (2011), 12 pp.
Citeaza: V. Rădulescu, D. Smets, *Critical singular problems on infinite cones*, **Nonlinear Anal. 54** (2003), pag. 1153 – 1164.

6. Zhang, Zhijun; Shi, Yongxiu; Xue, Yanxing Existence of entire solutions for semilinear elliptic systems under the Keller-Osserman condition, **Electron. J. Differential Equations 2010, No. 39** (2011), 9 pp.
Citeaza: F. Cirstea, V. Rădulescu, *Entire solutions blowing up at infinity for semilinear elliptic systems*, **J. Math. Pures Appl. (9) 81** (2002), pag. 827 – 846.

7. Zeddini, Noureddine Existence of positive solutions for some nonlinear elliptic systems on the half space, **Electron. J. Differential Equations 2010, No. 12** (2011), 9 pp.
Citeaza: F. Cirstea, V. Rădulescu, *Entire solutions blowing up at infinity for semilinear elliptic systems*, **J. Math. Pures Appl. (9) 81** (2002), pag. 827 – 846.

8. Zeddini, Noureddine Existence of positive solutions for some nonlinear elliptic systems on the half space, **Electron. J. Differential Equations 2010, No. 12** (2011), 9 pp.
Citeaza: M. Ghergu, V. Rădulescu, *Explosive solutions of semilinear elliptic systems with gradient term*, **RACSAM Rev. R. Acad. Cienc. Exactas Fs. Nat. Ser. A Mat. 97** (2003), pag. 467 – 475.

9. Zeddini, Noureddine Existence of positive solutions for some nonlinear elliptic systems on the half space, **Electron. J. Differential Equations 2011, No. 12** (2011), pag. 9
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

10. Zhao, Lin; Zhao, Peihao; Xie, Xiaoxia Existence and multiplicity of solutions for divergence type elliptic equations, **Electron. J. Differential Equations 2011, No. 43** (2011), pag. 9
Citeaza: A. Kristály, V. Rădulescu, C. Varga, *Variational principles in mathematical physics, geometry, and economics. Qualitative analysis of nonlinear equations and unilateral problems*, **Encyclopedia of Mathematics and its Applications, 136. Cambridge University Press, Cambridge, 2010**.

11. Chung, Nguyen Thanh Existence of infinitely many solutions for degenerate and singular elliptic systems with indefinite concave nonlinearities, **Electron. J. Differential Equations 2010, No. 30** (2011), 12 pp.
Citeaza: M. Mihailescu, V. Rădulescu, *Ground state solutions of non-linear singular Schrdinger equations with lack of compactness*, **Math. Methods Appl. Sci. 26** (2003), pag. 897 – 906.

12. Ayoujil, Abdesslem; El Amrouss, Abdel Rachid Continuous spectrum of a fourth order nonhomogeneous elliptic equation with variable exponent, **Electron. J. Differential Equations 2011, No. 24** (2011), 12 pp.

Citeaza: M. Mihailescu, V. Rădulescu, *A continuous spectrum for nonhomogeneous differential operators in Orlicz-Sobolev spaces*, **Math. Scand. 104** (2009), pag. 132 – 146.

13. Ayoujil, Abdesslem; El Amrouss, Abdel Rachid Continuous spectrum of a fourth order nonhomogeneous elliptic equation with variable exponent, **Electron. J. Differential Equations 2011, No. 24** (2011), 12 pp.
Citeaza: M. Mihailescu, V. Rădulescu, *Eigenvalue problems associated with nonhomogeneous differential operators in Orlicz-Sobolev spaces*, **Anal. Appl. (Singap.) 6** (2008), pag. 83 – 98.

14. Zhang, Zhijun; Shi, Yongxiu; Xue, Yanxing Existence of entire solutions for semilinear elliptic systems under the Keller-Osserman condition, **Electron. J. Differential Equations 2011, No. 39** (2011), 9 pp.
Citeaza: A. Ghanmi, H. Maagli, V. Rădulescu, N. Zeddini, *Large and bounded solutions for a class of nonlinear Schrödinger stationary systems*, **Anal. Appl. (Singap.) 7** (2009), pag. 391 – 404.

Rasdeaconu Rares

1. Y. Lee, N. Nakayama, *Simply connected surfaces of general type in positive characteristic via deformation theory*, preprint, http://arxiv.org/abs/1103.5185
Citeaza: R. Răsdeaconu, I. Şuvaina, *Smooth structures and Einstein metrics on* $\mathbb{CP}^2\#5,\ 6,\ 7\overline{\mathbb{CP}}^2$, **Math. Proc. Cambridge Philos. Soc. 147,** (2009), no. 2, 409–417.

Stavre Ruxandra

1. N. Auffray, M. Bonnet, S. Pagano, Identification de sources de chaleur dans le contexte de la thermographie infrarouge, **10e Colloque National en Calcul des Structures** (2011), France
Citeaza: A. Capatina, R. Stavre, *Algorithms and convergence results for an inverse problem in heat propagation*, **Int. J. Engng. Sci. 38** (2000), pag. 575 – 587

Timofte Aida

1. Hauke Hanke, Homogenization in gradient plasticity, **GAMM-Mitteilungen 34** (2011), pag. 102 – 106
Citeaza: Alexander Mielke, Aida Timofte, *Two-scale homogenization for evolutionary variational inequalities via the energetic formulation*, **SIAM Journal on Mathematical Analysis 39** (2007), pag. 642 – 668

Vajaitu Marian

1. I. E. Shparlinski, Modular Hyperbolas, **arXiv** (2011), pag. 1 – 74
Citeaza: M. Vâjâitu, A. Zaharescu, *Distribution of values of rational maps on the* $\mathbf{F}_p-$*points on an affine curve*, **Monatshefte fur Mathematik, 136** (2002), pag. 81–86

2. I. E. Shparlinski, Modular Hyperbolas, **arXiv** (2011), pag. 1 – 74
Citeaza: C. Cobeli, M. Vâjâitu, A. Zaharescu, *Distribution of gaps between the inverses* (mod q), **Proc. Edinburgh Math. Soc., 46** (2003), pag. 185– 203

3. I. E. Shparlinski, Modular Hyperbolas, **arXiv** (2011), pag. 1 – 74
Citeaza: C. Cobeli, M. Vâjâitu, A. Zaharescu, *Average estimates for the number of tuples of inverses* (mod p) *in short intervals*, **Bull. Math. Soc. Sc. Math. Roumanie, Thome 43(91), no.2** (2000), pag. 155 – 167

4. Kit-Ho Mak, A. Zaharescu, Poisson type phenomena for points on hyperelliptic curves modulo p, **arXiv** (2011), pag. 1–12.
Citeaza: M. Vâjâitu, A. Zaharescu, *Distribution of values of rational maps on the* $\mathbf{F}_p-$*points on an affine curve*, **Monatshefte fur Mathematik, 136** (2002), pag. 81–86

Vilcu Costin

1. De Satyan L. Devadoss, Joseph O'Rourke, *Discrete and Computational Geometry*, Princeton University Press, (2011), 544 pag., ISBN: 978-0691145532
Citeaza: C. Vîlcu, colaborator, în "Introducere", la "Mulţumiri".

Zamfirescu Tudor

1. Y. Tanoue, *Circles holding a regular triangular prism*, **Analele Stiinţ. Univ. Ovidius Constanţa, Ser. Mat. 19** (2011). *Citează*: T. Zamfirescu, *How to hold a convex body?* **Geom. Dedicata 54** (1995) 313-316.

6.3 Citari aparute in carti

Badea Lori

1. L. Chen, R. H. Nochetto, and C.-S. Zhang, Multigrid Methods for Elliptic Obstacle Problems on 2D Bisection Grids, in **Domain Decomposition Methods in Science and Engineering XIX**, Lecture Notes in Computational Science and Engineering, Volume 78 LNCSE, Springer, 2011, pag. 229-236, ISBN 978-3-642-11303-1.
Citeaza: L. Badea, X.-C. Tai and J. Wang, Convergence rate analysis of a multiplicative Schwarz method for variational inequalities, **SIAM J. Numer. Anal, 41**, 3, 2003, pp. 1052-1073.

Baditoiu Gabriel

1. Bang-Yen Chen, *Pseudo-Riemannian Geometry, δ-Invariants and Applications*, World Scinetific Publishing Co. Pte. Ltd. (2011), pag. 440 ISBN: 978-981-4329-63-7, 981-4329-63-0
Citeaza: G. Baditoiu, *Semi-Riemannian submersions with totally geodesic fibres*, **Tohoku Math. J. 56** (2004), pag. 176 - 204.

2. Bang-Yen Chen, *Pseudo-Riemannian Geometry, δ-Invariants and Applications*, World Scinetific Publishing Co. Pte. Ltd. (2011), pag. 440 ISBN: 978-981-4329-63-7, 981-4329-63-0
Citeaza: G. Bădiţoiu and S. Ianuş, *Semi-Riemannian submersions from real and complex pseudo-hyperbolic spaces*, **Differential Geometry and its Applications 16** (2002), pag. 79 - 94.

Beznea Lucian

1. Sergio Albeverio,Ruzong Fan,Frederik Herzberg *Hyperfinite Dirichlet Forms and Stochastic Processes*, Springer (2011), pag. 284 ISBN: 978-3-642-19658-4
   Citeaza: L. Beznea, N. Boboc, *Potential Theory and Right Processes*, **Kluwer/Springer** (2004)

2. Sergio Albeverio,Ruzong Fan,Frederik Herzberg *Hyperfinite Dirichlet Forms and Stochastic Processes*, Springer (2011), pag. 284 ISBN: 978-3-642-19658-4 *Citeaza*: L. Beznea, N. Boboc, M. Röckner: *Markov processes associated with L^p-resolvents, applications to quasi-regular Dirichlet forms and stochastic differential equations* **C. R. Acad. Sci. Paris Ser. I 349** (2008), pag. 323-328.

3. Zenghu Li *Measure-valued branching Markov processes*, Springer Verlag (2011) ISBN 978-3-642-15003-6
   Citeaza: L. Beznea, *Potential theoretical methods in the construction of measure-valued Markov branching processes*, **J. European Math. Soc. 13** (2011), pag. 685-707

Boca Florin-Petre

1. **M. Marcolli**, Noncommutative geometry and arithmetic (ICM 2010 invited talk, Mathematical Physics section), *Proceedings of the International Congress of Mathematicians 2010 (Hyderabad, India, August 19-27, 2010), Vol. III, World Scientific (2011)*, pag. 2057-2077 ISBN: 978-981-4324-30-4
   Citeaza: F. Boca, *Projections in rotation algebras and theta functions*, **Comm. Math. Phys. 202** (1999), pag. 325–357.

Radulescu Vicentiu

1. L. Diening, P. Harjulehto, P. Hästö, M. Ruzicka, *Lebesgue and Sobolev spaces with variable exponents*, Lecture Notes in Mathematics, vol. 2017, Springer-Verlag, Berlin, (2011), pag. 509. ISBN: 978-3-642-18362-1.
   Citeaza: M. Mihailescu, P. Pucci, and V. Rădulescu, *Eigenvalue problems for anisotropic quasi-linear elliptic equations with variable exponent*, **J. Math. Anal. Appl., 340** (2008), pag. 687 – 698.

2. L. Diening, P. Harjulehto, P. Hästö, M. Ruzicka, *Lebesgue and Sobolev spaces with variable exponents*, Lecture Notes in Mathematics, vol. 2017, Springer-Verlag, Berlin, (2011), pag. 509. ISBN: 978-3-642-18362-1.
   Citeaza: M. Mihailescu, V. Rădulescu, *On a nonhomogeneous quasilinear eigenvalue problem in Sobolev spaces with variable exponent*, **Proc. Amer. Math. Soc., 135** (2007), pag. 2929 – 2937.

3. L. Diening, P. Harjulehto, P. Hästö, M. Ruzicka, *Lebesgue and Sobolev spaces with variable exponents*, Lecture Notes in Mathematics, vol. 2017, Springer-Verlag, Berlin, (2011), pag. 509. ISBN: 978-3-642-18362-1.
   Citeaza: M. Mihailescu, V. Rădulescu, *A multiplicity result for a nonlinear degenerate problem arising in the theory of electrorheological fluids*, **Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 462** (2006), pag. 2625 – 2641.

4. L. Dupaigne, *Stable solutions of elliptic partial differential equations*, Chapman & Hall/CRC Monographs and Surveys in Pure and Applied Mathematics 143, Boca Raton, FL (2011), pag. 321. ISBN: 978-1-4200-6654-8.
Citeaza: P. Mironescu, V. Rădulescu, *The study of a bifurcation problem associated to an asymptotically linear function*, **Nonlinear Anal. 26** (1996), pag. 857 – 875.

Timofte Vlad

1. J. Acharya, H. Das, A. Orlitsky, S. Pan, Algebraic computation of pattern maximum likehood, **Proceedings of the IEEE International Symposium on Information Theory** 2011, art. 6034155, pag. 400–404,
Citeaza: V. Timofte, *On the positivity of symmetric polynomial functions. Part I: General results*, **J. Math. Anal. Appl. 284** (2003), pag. 174–190.

Timotin Dan

1. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Bakonyi, M.; Timotin, D., *The central completion of a positive block operator matrix*, **Operator theory, structured matrices, and dilations, Theta Ser. Adv. Math., 7** (2007), pag. 69–83.

2. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Bakonyi, M.; Timotin, D., *On a conjecture of Cotlar and Sadosky on multidimensional Hankel operators*, **C. R. Acad. Sci. Paris Sr. I Math. 325** (1997), pag. 1071-1075.

3. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Bakonyi, M.; Timotin, D., *On an extension problem for polynomials*, **Bull. London Math. Soc. 33** (2001), pag. 599–605.

4. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Bakonyi, M.; Timotin, D., *Extensions of positive definite functions on free groups*, **J. Funct. Anal. 246** (2007), pag. 31–49.

5. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Bakonyi, M.; Timotin, D., *Extensions of positive definite functions on amenable groups*, **Canad. Math. Bull. 54** (2011), pag. 3–11.

6. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Hadwin, D.; Larson, D. R.; Timotin, D., *Approximation theory and matrix completions*, **Linear Algebra Appl. 377** (2004), pag. 165–179.

7. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Timotin, Dan, *A note on Parrott's strong theorem*, **J. Math. Anal. Appl. 171** (1992), pag. 288–293.

8. Bakonyi, Mihály; Woerdeman, Hugo J., *Matrix completions, moments, and sums of Hermitian squares*, Princeton University Press (2011), pag. xii+518, ISBN:978-0-691-12889-4
Citeaza: Timotin, Dan, *Completions of matrices and the commutant lifting theorem*, **J. Funct. Anal. 104** (1992), pag. 291–298.

Vajaitu Marian

1. G. Groza, A. Popescu, *Extinderi de corpuri valuate*, Editura Academiei Romane (2011), pag. 238 ISBN: 978-973-27-2062-2
Citeaza: M. Vâjâitu, A. Zaharescu, *Trace functions and Galois invariant p−adic measures*, **Publ. Mat. 50** (2006), pag. 43 – 55

2. G. Groza, A. Popescu, *Extinderi de corpuri valuate*, Editura Academiei Romane (2011), pag. 238 ISBN: 978-973-27-2062-2
Citeaza: V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu, *The p-adic measure on the orbit of an element of* $\mathbf{C_p}$, **Rend. Semin. Mat. Univ. Padova, 118** (2007), pag. 197 – 216

3. G. Groza, A. Popescu, *Extinderi de corpuri valuate*, Editura Academiei Romane (2011), pag. 238 ISBN: 978-973-27-2062-2
Citeaza: M. Vâjâitu, A. Zaharescu, *On Krasner analytic functions and the p−adic Mellin transform*, **Math. J. Ibaraki Univ. 37** (2005), pag. 23– 33

4. G. Groza, A. Popescu, *Extinderi de corpuri valuate*, Editura Academiei Romane (2011), pag. 238 ISBN: 978-973-27-2062-2
Citeaza: M. Vâjâitu, A. Zaharescu, *Non-Archimedean Integration and Applications*, **The Publishing House of the Romanian Academy, ISBN(13) 978-973-27-1466-9** (2007), pag. 120.

7 Activitate de cercetare

7.1 Scurta descriere

Achimescu Sever - 1) Forme modulare p-adice. 2) Functii rigid analitice echivariante.

Albu Toma - In anul 2011 m-am ocupat de urmatoarele subiecte:

1. Introducerea si studiul conceptului de latice CC (sau latice extending) care generalizeaza pe cel de CS modul (sau modul extending).

2. Demonstrarea extinderii Teoremei Osofsky-Smith de la module la latici modulare superior continue, cu aplicatii la categoriile Grothendieck si categoriile de module echipate cu teorii de torsiune ereditare.

3. Introducerea si studiul conceptului de clasa de latici $\sigma[L]$ subgenerata de o latice modulara superior continua L, care extinde pe cel de clasa de module $\sigma[M_R]$ subgenerata de un R-modul drept M_R.

4. Introducerea si studiul conceptului de latice injectiva.

5. Dezvoltarea Teoriei tip pentru laticile modulare, care extinde Teoria tip din categoriile de module, cu aplicatii la categoriile Grothendieck si categoriile de module echipate cu teorii de torsiune ereditare.

6. Introducerea si studiul conceptului de pereche Baer de latici modulare, cu aplicatii la categoriile Grothendieck si categoriile de module echipate cu teorii de torsiune ereditare.

Ambro Florin - În anul 2011 am lucrat la doua proiecte de cercetare:

1. *Teoreme de anulare pentru divizori adjuncti.* Teorema de anulare a lui Kodaira rezulta dintr-un rezultat mai general, teorema de injectivitate a lui Esnault-Viehweg. Am extins teorema de injectivitate la cazul log canonic, inclusiv cel relativ. Am obtinut aplicatii la proprietati de conectivitate pentru centrii log canonici ai unei varietati logaritmice de tip Calabi-Yau. Urmeaza sa extind teorema de injectivitate pentru ideale de tip multiplicativ, si la cazul cand ambientul nu este ireductibil (pentru studiul degenerarilor in spatiul de moduli de varietati logaritmice).

2. *Finit generarea inelului log canonic.* Am studiat lucrarile aparute recent pe aceasta tema (Birkar-Cascini-Hacon-McKernan, Cascini-Lazic). Din acest studiu s-a desprins un program de stabilire a finit generarii, printr-o noua metoda, teoria divizibilitatii in inele multi-graduate. Metoda mea este algebrica, si sper sa duca la rezultate efective asupra generatorilor inelelor log canonice. Pana acum am pus la punct acest program, si am studiat invariantii divizibilitatii pe multe exemple de inele multigraduate pe varietati torice.

Anghel Cristian - În anul 2011 am studiat noi exemple de fibrati care nu satisfac inegalitatea tare a lui Bogomolov conjecturata de Douglas, Reinbacher si Yau.

Anton Marian - În anul 2011 am efectuat cercetari in domeniul topologiei algebrice aplicate la retele de sensori si am scris un articol despre o metoda care determina cand o retea de sensori

acopera un domeniu marginit. De asemenea am investigat o serie de conjecturi in omologia grupurilor aritmetice care predict anularea unor clase de omologie provenite din aproximatii etale. Aceste investigatii duc la construirea unor algoritmi de dectectare a elementelor transgresive in sirurile spectrale.

Aprodu Marian - În anul 2011 m-am ocupat de trei direcţii principale de cercetare.

În primul rând, am continuat, împreună cu Gavril Farkas, studiul curbelor cu geometrie specială în relaţie cu syzygy-urile scufundărilor lor canonice. În această direcţie, am arătat valabilitatea conjecturii Green pentru acoperiri duble general ale curbelor plane şi acoperir triple generale ale curbelor eliptice. Acest rezultat răspunde pozitiv unei întrebări a lui F. Schreyer şi a fost acceptat spre publicare.

În al doilea rând, am continuat, împreună cu M. Toma şi R. Moraru, studiul fibratelor de rang 2 pe suprafeţe Kodaira primare. Arătăm că, în intervalul ne-filtrabil, spaţiile de moduli 2-dimensionale sunt la rândul lor suprafeţe Kodaira primare. Demonstraţia se bazează pe un articol în colaborare cu V. Brînzănescu şi M. Toma, precum şi pe o serie de articole ale lui V. Brînzănescu şi R. Moraru, unde fibratele de rang 2 sunt legate de curbele spectrale.

În al treilea rând, am găsit, împreună cu M. Marchitan, o legatură naturală între două metode clasice de contructie a fibratelor de rang 2 pe suprafeţe Hirzebruch.

Arsu Gruia - În anul 2011

În studiul L^2-mărginiri şi a proprietăţilor Schatten-von Neumann ale operatorilor pseudo-diferenţiali, clasele de simboluri folosite sunt spaţii de funcţii (având o structură de algebră respectiv ideal într-o algebră cu înmulţ irea obişnuită) care sunt cazuri particulare fie de spaţii de modulaţie fie de spaţii Sobolev uniform locale.

În anul 2011 am continuat studiul spaţiilor Sobolev uniform locale cunoscute şi ca spaţii Kato-Sobolev. Spaţiile Kato-Sobolev au fost introduse de către Tosio Kato în lucrarea
- The Cauchy problem for quasi-linear symmetric hyperbolic systems, *Arch. Rational Mech. Anal.* **58** (1975), 3, 181–205,
şi pot fi privite ca o clasă convenabilă de funcţii care local sunt Sobolev şi care satisfac un anume tip de mărginire la infinit. Menionăm că ele au fost definite pentru cazul în care ordinele sunt nunere naturale.

În studiul făcut am urmărit câteva direcţii pe care le voi menţiona acum:
- Renunţarea la restricţia privind ordinele spaţiilor;
- Stabilirea unor rezultate de scufundare (în spiritul celor ale lui Kato), care exprimă proprietăţile de multiplicare ale spaţiilor Kato-Sobolev;
- Dezvoltarea unui calcul funcţional analitic pentru algebrele Kato-Sobolev care are la bază o teoremă Wiener-Lévy pentru algebrele Kato-Sobolev;
- Introducerea unei familii crescătoare de spaţii $\left\{\mathcal{K}_p^{\mathbf{s}}\right\}_{1\leq p\leq\infty}$ pentru care $\mathcal{K}_\infty^{\mathbf{s}}=\mathcal{H}_{\mathtt{ul}}^{\mathbf{s}}$ şi analiza modului în care ele interpolează.
- Relaţia acestor spaţii cu alte spaţii folosite ca spa ţii de simboluri pentru operatori pseudo-diferenţiali. Mai exact am demonstrat o teoremă de scufundare de forma $\mathcal{K}_{p,\mathbb{V}}^{\mathbf{s}}\left(\mathbb{R}^n\right)\hookrightarrow S_w^p\left(\mathbb{R}^n\right)$, dacă $1\leq p\leq\infty$, $\mathbb{R}^n=V_1\oplus...\oplus V_j$, $s_1>\dim V_1$, ..., $s_j>\dim V_j$. Aici $\{S_w^p\left(\mathbb{R}^n\right)\}_{1\leq p\leq\infty}$ sunt o familie de spaţii de modulaţie folosite în mod uzual ca spaţii de simboluri.
- Folosind teorema de scufundare menţionată mai sus şi proprietăţile de interpolare ale spaţiilor $\left\{\mathcal{K}_p^{\mathbf{s}}\right\}_{1\leq p\leq\infty}$, am demonstrat rezultate privind proprietăţile Schatten-von Neumann ale operatorilor pseudo-diferenţiali cu simboluri elemente ale idealelor $\mathcal{K}_p^{\mathbf{s}}$.

Modul de abordare şi tehnicile folosite permit extindertea majorităţii rezultatelor de la cazul

spaţiilor Sobolev la spaţiile $\mathcal{B}_k \equiv B_{2,k}$ introduse de Hörmander. În prezent lucrez în această direcţie.

Rezultatele fac obiectul lucrării: *On Kato-Sobolev spaces.* Aceasta lucrare a fost postată pe arxiv.org având adresa: http://arxiv.org/abs/1110.6337

Badea Lori - În anul 2011 activitatea de cercetare a privit, in principal, studiul metodelor multi-nivel de descompunerea domeniilor aplicate la probleme neliniare provenite din mecanica mediilor continue. Am avut in vedere problemele de plasticitate si problemele de contact cu frecare. Am trimis spre publicare articolul L. Badea, Multigrid methods for some quasi-variational inequalities, **Discrete & Continuous Dynamical Systems - Series S**, submitted, 2011 am in faza finala de redactare lucrarea L. Badea, Global convergence rate of a standard multigrid method for variational inequalities si mi-a fost acceptat spre publicare un articol. De asemenea, am participat la contractul CNCSIS ID-PCE nr. 566/2009 si la subcontractul nr. 1/2010 al contractului CNCSIS, PCCE nr. 6/2010. In sfarsit, am tinut o expunere in cadrul unei conferinte internationale. Toate aceste activitati sunt legate de tematica mai sus mentionata.

Baran Andrei - În anul 2011 m-am ocupat de demonstrarea unor rezultate de coerenta a imaginilor directe prin aplicatii proprii pentru D_X-module coerente (unde D_X este inelul operatorilor diferentiali pe o varietate complexa). Rezultatul poate fi vazut ca o generalizare a teoremei de imagine directa a lui Grauert pentru fascicole coerente pe spatii analitice complexe. Dificultatea problemei consta in faptul ca un D_X-modul nu admite, in general, o filtrare globala "buna".

O problema similara, dar mai dificila, se pune pentru E_X-module (unde E_X este inelul operatorilor pseudodiferentiali definiti pe fibratul cotangent al unei varietati complexe). Am reusit demonstarea unor rezultate partiale - demonstarea teoremei de coerenta a imaginilor directe pentru $E_X(0)$-module coerente (unde $E_X(0)$ este inelul operatorilor pseudodiferentiali de ordin ≤ 0).

Barcau Alexandru Mugurel - În anul 2011 activitatea mea de cercetare s-a îndreptat către studiul δ-funcţiilor $f : X(\mathbb{Z}_p) \to \mathbb{Z}_p$, unde $X/\mathbb{Z}_p$ este o schemă netedă. Acest studiu a fost generat de către următorul rezultat al lui A. Buium: o funcţie $f : \mathbb{Z}_p \to \mathbb{Z}_p$ este analitică dacă şi numai dacă este o δ-funcţie, i.e. există m a.î. f se poate reprezenta sub forma $f(x) = F(x, \delta x, ..., \delta^m x)$, unde F este o serie de puteri restricţionată cu coeficienţi din $\mathbb{Z}_p$. Acest rezultat poate fi văzut ca o "interpolare diferenţială"; într-adevăr dacă f este dată de seriile de puteri $G_i(x)$ ce converg pe bilele ce acoperă $\mathbb{Z}_p$, atunci rezultatul lui Buium spune că se poate găsi o singură serie $F(x, \delta x, ..., \delta^m x)$ care este egală cu $G_i(x)$ pe B_i pentru fiecare i. Problema pe care o investigăm este generalizarea rezultatului lui Buium: care funcţii analitice $f : X(\mathbb{Z}_p) \to \mathbb{Z}_p$, unde $X/\mathbb{Z}_p$ este o schemă netedă, vin din δ-funcţii?

Baditoiu Gabriel - În anul 2011 activitatea de cercetare a privit urmatoare probleme:
(i) a clasificarii submersiilor pseudo-Riemann de la diferite spatii homogene,
(ii) a clasificarii unor metricilor Einstein omogene si
(iii) studiul integrabilitatii ecuatiei de tip Lax asociata unui algebre Hopf graduata, conexa, si comutativa si extinderea unor rezultate obtinute in lucrarea G. Baditoiu and S. Rosenberg, Lax pair equations and Connes-Kreimer renormalization, Comm. Math. Physics, 296 (2010), no. 3, 655-680, DOI: 10.1007/s00220-010-1034-7. Am tinut o expunere in cadrul unei conferinte internationale pe aceasta tema.

Barcanescu Serban - In 2011 am continuat studiul metricilor planului absolut , descrise de anumite configuratii de drepte si puncte, in particular de configuratia Titeica-Johnson . Impreuna cu W.Boskoff si A.Bobe am elaborat o lucrare ce continua la cazul non generic studiul anterior al cazului configuratiei generice.

In contextul preocuparilor Seminarului de Algebra Combinatoriala am aprofundat studiul algebrei McMullen a valuarilor complexelor poliedrale reale , pe linia McMullen-Morelli-Ewald-Brion, care este directionata pe de o parte spre geometria convexa si combinatorica acestor complexe si, pe de alta parte, spre geometria algebrica (prin aparitia naturala a varietatilor torice asociate structurilor poliedrale).

Astfel, via teorema Hirzebruch-Riemann-Roch , se stabileste o legatura directa intre invarianti combinatoriali ai unor politoape (de pilda numarul de puncte laticiale contigue) si invarianti geometrici (de pilda caracteristica Euler) asociati fasciculelor inversabile (definite de politoape) pe anumite varietati torice ale unor unor evantaie bineprecizate. Clasele Todd ale varietatilor torice apar natural in calculul caracteristicii euleriene. Astfel de legaturi sunt cunoscute pentru varietati torice convenabile (netede, proiective), dar domeniul este intens cercetat deoarece ramane deschis cazul aparitiei singularitatilor precum si exploatarea numerica a datelor in sprijinul unor conjecturi naturale.

(Exista posibilitatea ca sistemul de programe pentru calcule poliedrale, elaborat de prof. W. Bruns(Osnabruck) si dr. Bogdan Ichim(IMAR) sa fie util in directia verificarii numerice a cojecturilor din teoria poliedrelor).

In acelasi context, am studiat posibilitatea aplicarii unei inversiuni Mobius pe o structura ce urmeaza a fi definita (cercetarea diversilor candidati pentru acesta structura este in curs -articolul lui R.Morelli din Advances nr.100(1993) propune un candidat, dar, acesta fiind dat in termeni de geometrie convexa, identificare lui combinatoriala si algebrica nu reiese usor), in vederea algebrizarii teoremei Pick-Reeve-Macdonald, ce leaga calculul volumelor de anumite polinoame laticiale.

Belinschi T. Serban - În anul 2011 am lucrat în două direcţii: studiul distribuţiilor cu valori operatori si al transformărilor analitice asociate lor, şi studiul valorilor proprii ale matricilor aleatoare unitar invariante. Prima directie de studiu a produs deja un articol (mentionat în sectiunea 7.3). În clipa de faţă plănuiesc sa dezvolt acest subiect in doua sub-directii: prima este o dezvoltare a unei teorii H^p necomutative în spiritul teoriei H^∞ dezvoltate deja de Voiculescu. Lucrez la acest proiect în colaborare cu mai multi co-autori, în special cu Mihai Popa şi Victor Vinnikov. A doua directie se referă la identificarea noţiunilor necomutative analoge teoriei polinoamelor ortogonale din analiza clasică. Acest proiect se desfaşoara in colaborare cu M. Anshelevich, F. Boca şi R. Speicher. Al doilea subiect de studiu urmăreşte in principal o mai bună întelegere a comportamentului asimptotic al sumelor de tipul $UAU^* + VBV^*$, unde U, V sunt matrici unitare $N \times N$ aleatoare Haar-distribuite si A, B sunt matrici deterministe. Am inceput acest proiect în timpul vizitei mele la Insitutul de Matematica din Toulouse, impreuna cu Mireille Capitaine.

Beltita Daniel - În anul 2011, Daniel Beltiţă efectuat o activitate de cercetare în următoarele direcţii:

(i) În colaborare cu Ingrid Beltiţă (IMAR) a rezolvat o problemă de liniaritate pentru vectorii diferenţiabili în raport cu unele reprezentări de grupuri Lie infinit dimensionale pe spaţii local convexe. Această problemă este similară cu fenomenul legat de faptul că liniaritatea diferenţialei unei funcţii de mai multe variabile nu este asigurată de simpla existenţă a

derivatelor parţiale ale acelei funcţii. În acest sens s-a obţinut de fapt un rezultat general valabil pentru grupurile topologice pentru care multimea subgrupurilor cu un parametru are o structura de spatiu vectorial cu adunarea definită printr-o formulă Trotter în care convevrgenţa este uniformă pe intervalele compacte. In acest cadru s-a demonstrat liniaritatea diferentialei pentru orice funcţie care este local uniform continuu diferenţiabilă pe grup. Rezultat este valabil pentru clase largi de grupuri topologice: grupuri Lie local exponenţiale (în particular grupuri Lie-Banach), grupuri de bucle, grupuri de difeomorfisme ale varietăţilor compacte, grupuri conexe local compacte, grupuri unitare ale algebrelor von Neumann cu urme finite, limite directe de grupuri Lie finit dimensionale, grupuri topologice nilpotente. Aceste rezultate au fost deja publicate în articolul de I. Beltiţă şi D. Beltiţă: *On differentiability of vectors in Lie group representations*, Journal of Lie Theory 21 (2011), 771–785.

(ii) Tot în colaborare cu Ingrid Beltiţă (IMAR) a demonstrat că oice algebră Lie local convexă nilpotentă are o reprezentare fidelă prin operatori liniari nilpotenţi pe un spaţiu local convex. În cazul unei algebre Lie-Banach nilpotente se obţine o reprezentare mărginită prin oepratori mărginiţi nilpotenţi pe un spaţiu Banach. Aceste rezultate rezolvă o problemă ridicată de K.-H. Neeb (*Towards a Lie theory of locally convex groups* Japanese J. Math. 1 (2006), no. 2, 291-468) şi sunt incluse într-o lucrare ce a fost trimisă spre publicare şi este accesibilă sub forma preprintului arXiv:1108.5563v1 [math.RT].

Beltita Ingrid - În anul 2011, Ingrid Beltiţă efectuat o activitate de cercetare în următoarele direcţii:

(i) În colaborare cu Daniel Beltiţă (IMAR) a rezolvat o problemă de liniaritate pentru vectorii diferenţiabili în raport cu unele reprezentări de grupuri Lie (infinit dimensionale) pe spaţii local convexe, problemă legată de faptul că, în general, liniaritatea diferenţialei unei funcţii de mai multe variabile nu este asigurată de simpla existenţă a derivatelor parţiale ale acelei funcţii. S-a demonstrat liniaritatea diferenţialei pentru orice funcţie local uniform continuu diferenţiabilă pe un grup topologic pentru care multimea subgrupurilor cu un parametru are o structură de spaţiu vectorial cu adunarea definită printr-o formulă Trotter în care convevrgenţa este uniformă pe intervalele compacte. Rezultatul este valabil pentru clase importante de grupuri topologice: grupuri Lie local exponenţiale (în particular grupuri Lie-Banach), grupuri de bucle, grupuri de difeomorfisme ale varietăţilor compacte, grupuri conexe local compacte, grupuri unitare ale algebrelor von Neumann cu urme finite, limite directe de grupuri Lie finit dimensionale, grupuri topologice nilpotente. Aceste rezultate au fost deja publicate în articolul de I. Beltiţă şi D. Beltiţă: *On differentiability of vectors in Lie group representations*, Journal of Lie Theory 21 (2011), 771–785.

(ii) În colaborare cu Daniel Beltiţă (IMAR) a demonstrat o variană de teoremă Birkhoff de scufundare pentru algebrele Lie convexe nilpotente. Astfel, a demonstrat că orice algebră Lie local convexă nilpotentă are o reprezentare fidelă prin operatori liniari nilpotenţi pe un spaţiu local convex. Pentru algebre Lie-Banach nilpotente se obţine astfel o reprezentare mărginită prin operatori mărginiţi nilpotenţi pe un spaţiu Banach. Aceste rezultate rezolvă o problemă ridicată de K.-H. Neeb (*Towards a Lie theory of locally convex groups* Japanese J. Math. 1 (2006), no. 2, 291-468) şi sunt incluse într-o lucrare ce a fost trimisă spre publicare şi este accesibilă sub forma preprintului arXiv:1108.5563v1 [math.RT].

Berceanu Barbu - În anul 2011 am reluat studiul spatiilor de configuratii ale varietatilor proiective complexe, folosind modelul Fulton-MacPhearson-Kriz si teoria reprezentarilor grupului simetric. In paralel am studiat asimptotica nodurilor prime.

Beznea Lucian - În anul 2011 am continuat aplicarea de metode analitice si probabiliste de teoria potentialului in situatii infinit dimensionale. In particular, am continuat studiul regularităţii traiectoriilor proceselor Markov, avand un spatiu general de stari, cu aplicatii la ecuatii diferentiale stocastice pe spatii Hilbert, continuand colaborarea cu Michael Röckner (Univ. Bielefeld). Am studiat (in colaborare cu O. Lupaşcu) existenţa si regularitatea proceslor de ramificare discretă cu valori măsuri.

Boca Florin-Petre - În anul 2011 am continuat studiul distribuţiei punctelor laticeale hiperbolice. Grupul modular $\Gamma = PSL_2(\mathbb{Z})$ acţionează pe semiplanul superior $\mathbb{H} = \{\Im z > 0\}$ prin transformări fracţionare liniare. Fie $R > 0$ şi $Q = e^{R/2}$. Considerăm toate punctele laticeale hiperbolice γi, $\gamma \in \Gamma$, din interiorul discului hiperbolic de centru i şi rază R. Să notăm cu $\theta_\gamma \in [-\pi, \pi]$ unghiul dintre geodezica verticală $[i, 0]$ şi raza geodezică $[i, \gamma i]$. Se ştie că numărul de elemente ale acestei mulţimi (cu multiplicităţi) este $4B_Q \sim 3Q^2/2$ şi că unghiurile θ_γ sunt uniform distribuite când $R \to \infty$. De fapt aceste unghiuri sunt exact unghiurile dintre geodezicele închise pe suprafaţa modulară $\mathcal{M} = \Gamma\backslash\mathbb{H}$ ce trec prin $\Pi(i)$, unde $\Pi : \mathbb{H} \to \mathcal{M}$ este aplicaţia cât. Geodezicele închise de acest tip pe $\mathcal{M}$ au fost considerate iniţial de R. Fricke and F. Klein (1892). Recent, ele au fost studiate într-un context modern şi numite geodezice reciproce de către P. Sarnak (2007).

Statistica spaţiilor dintre elementele unui şir, în particular perechea de corelaţie, dă o măsura mai fină asupra "gradului de distribuţie uniformă" a unui şir, sau mai general a unui şir crescător de submulţimi finite din $[0, 1]$. Reamintim ca pentru statistica de tip Poisson densitatea g_2 a perechii de corelaţie este egală cu funcţia constantă 1. În general problema determinării perechii de corelaţie este dificilă. Dintre exemplele interesante de şiruri care nu au statistică de tip Poisson menţionăm: şiruri de tip Farey (studiate de Boca, Zaharescu şi co-autori), părţile fracţionare ale lui $\sqrt{n}$ (studiate de N. Elkies şi C. McMullen), punctele vizibile asociate laticilor translatate aleator (J. Marklof şi A. Strömbergsson).

Un rezultat obţinut în ultimul an în colaborare cu A. A. Popa, V. Paşol şi A. Zaharescu arată că perechea de corelaţie a unghiurilor menţionate mai sus există şi nu este Poisson când $R \to \infty$. Densitatea ei este o funcţie continuă g_2 ce se poate calcula efectiv. În particular se arată că

$$g_2(0) = \frac{8}{3} \sum_{\mathcal{C}} \sum_{n=1}^{\infty} \frac{1}{e^{n\ell(\mathcal{C})} - 1} = 0.7015...,$$

unde sumarea se face după toate geodezicele primitive reciproce $\mathcal{C}$ de lungime $\ell(\mathcal{C})$. Acest lucru arată că iregularităţile din distribuţia unghiulară a punctelor laticeale hiperbolice apar ca urmare a unor motive subtile de natură aritmetică.

Un alt fapt interesant este că înlocuirea "originii" i cu un alt punct $\omega \in \mathcal{M}$ produce în general o pereche de corelaţie diferită. Acest fenomen va fi discutat în detaliu într-o lucrare în colaborare cu Popa şi Zaharescu.

Bonciocat Anca Iuliana - În anul 2011 am obtinut o serie de rezultate legate de studiul inegalităţilor funcţionale pe spaţii metrice cu măsură şi de factorizarea polinoamelo, după cum urmează:
- m-am ocupat cu studiul inegalităţilor Talagrand de tip transportation cost pe spaţii metrice

discrete şi grafuri; am studiat o inegalitate slabă de transport în cazul spaţiilor metrice discrete cu curbura Ricci minorată, ce are drept consecinţă o inegalitate de concentrare a măsurii de referinţă pe spaţiul metric considerat; am obţinut rezultate de integrabilitate a funcţiilor Lipschitz pe spaţii metrice ce satisfac o inegalitate Talagrand slabă de transport.
- am studiat extinderi ale inegalităţilor de transport, înlocuind metrica Wasserstein cu metricile definite în articolul *A new class of transport distances between measures.* (Calc. Var. Partial Differential Equations 34, no. 2, 193231 (2009), autori J. Dolbeault, B. Nazaret, G. Savare); în cazul continuu aceste inegalităţi sunt echivalente cu inegalităţile Talagrand de transport, însa în cazul discret se obţin inegalităţi mai slabe.
- am obţinut criterii de ireductibilitate pentru polinoame ai căror coeficienţi sunt obţinuti prin exprimarea numerelor prime prin diverse forme pătratice (e.g. forme pătratice având coeficienţii daţi de şirul lui Lucas) şi am exprimat rezultantul dintre un polinom arbitrar şi un polinom de grad 2, prin intermediul unor forme liniare recurente de ordinul 2.
- am obţinut criterii de ireductibilitate pentru polinoame Littlewood, ca şi pentru alte clase de polinoame cu coeficienţi întregi.

Bonciocat Nicolae Ciprian - În anul 2011 am obtinut o serie de rezultate privind factorizarea polinoamelor si studiul ecuatiilor diofantice, dupa cum urmeaza:
- daca f si g sunt polinoame cu coeficienti intregi, si $|g(\theta)| > 1$ pentru orice radacina θ a lui f, atunci numarul total al factorilor ireductibili ai lui f (numarati cu multiplicitati) nu poate depasi numarul total al factorilor primi ai rezultantului lui f si g (numarati cu multiplicitati).
- daca f si g sunt polinoame cu coeficienti intregi si $|Res(f,g)| = p \cdot q$, unde p este un numar prim si q este un intreg pozitiv, si $|g(\theta)| > q$ pentru fiecare radacina θ a lui f, atunci f este ireductibil peste $\mathbb{Q}$.
- daca f este un polinom Littlewood de grad n astfel incat $|b^n f(c/b)|$ este un numar prim pentru doi intregi nenuli b, c cu $|c| \geq 2|b| + 1$ sau $|b| \geq 2|c| + 1$, atunci f este ireductibil.
- exprimarea rezultantului dintre un polinom arbitrar si un polinom de grad 2 prin intermediul unor forme liniare recurente de ordinul 2, si obtinerea de criterii de ireductibilitate pentru polinoame ai caror coeficienti sunt obtinuti prin exprimarea numerelor prime prin diferite forme patratice (de exemplu forme patratice avand coeficientii dati de sirul lui Lucas).
- pentru orice intreg $k \geq 2$ si orice doua polinoame relativ prime $f, g \in \mathbb{Z}[X]$ cu $\deg g - \deg f \in \{1, 2, 3\}$, polinomul $f(X) + p^k g(X)$ este ireductibil peste $\mathbb{Q}$ daca p este un numar prim suficient de mare (deci pentru toate numerele prime mai mari decat o anumita constanta p_0).
- date fiind doua polinoame relativ prime $f, g \in \mathbb{Z}[X]$ cu $\deg g - \deg f \in \{1, 2, 3\}$, si orice numar prim p care nu divide coeficientul dominant al lui f, polinomul $f(X) + p^k g(X)$ este ireductibil peste $\mathbb{Q}$ pentru k numar natural suficient de mare (deci pentru toate numerele naturale k mai mari decat o anumita constanta k_0).
- obtinerea unor demonstratii efective pentru cele doua rezultate anterior mentionate, si anume gasirea unor expresii concrete pentru p_0 si k_0 in functie de inaltimile si gradele celor doua polinoame f si g, si imbunatatirea pentru cazul $k = 1$ a constantei p_0 cunoscute anterior.
- obtinerea unor rezultate similare pentru polinoame in mai multe nedeterminate peste un corp arbitrar, in care numarul prim p este inlocuit cu un polinom ireductibil intr-un numar arbitrar r de nedeterminate $X_1, \ldots, X_r$, de grad suficient de mare in raport cu una dintre nedeterminate, iar f si g sunt polinoame relativ prime in $r + 1$ nedeterminate $X_1, \ldots, X_{r+1}$.
- reducerea marginilor pentru componente si pentru numarul eventualelor $D(-1)$-cuadrupluri existente, in speranta probarii conjecturii care afirma inexistenta unor astfel de cuadrupluri.

Brinzanescu Vasile - În anul 2011 am abordat probleme din urmatoarele teme de cercetare:
(a) Spatii de moduli de fibrati vectoriali pe varietati Calabi-Yau eliptice de dimensiune 3;
(b) Sisteme hamiltoniene complet integrabile algebric.

Buliga Marius - În anul 2011 am continuat studiul spaţiilor metrice cu dilatări (sau structuri cu dilatări) şi formulăi variaţionale care utilizează bipotenţialele.

Burciu Sebastian - In acest an au fost studiate categoriile de fuziune, in principal cele care admit un functor fibrat si deci provin din algebre Hopf semisimple. A fost de asemenea continuat studiul nucleelor de reprezentari pentru algebrele Hopf semisimple. A fost introdusa notiunea de nucleu stang si drept pentru a compensa lipsa de normalitate a notiunii de nucleu definita anterior in Proc AMS 12/2009. Aceasta noua notiune de nucleu permite obtinerea unui rezultat similar teoremei Brauer pentru orice algebra Hopf semisimpla.

S-a studiat structura subalgebrelor coideal ale algebrelor Hopf de tipul $A\#kF$ unde A este o algebra Hopf si F un grup finit. In cazul particular $A = kG^*$ se obtin subalgebrele coideal ale algebrelor de tip Kac. In acest caz, o caracterizare completa pentru subalgebrele Hopf normale ale acestor algebre Hopf a fost gasita. Rezultatul obtinut generalizeaza rezultatele deja cunoscute pentru C*-algebre.

Folosind tehnici asemnatoare s-au studiat de asemenea subcategoriile de fuziune ale unui cross product dintr-o categorie de fuziune $\mathcal{C}$ si un grup finit G care actioneaza pe aceasta categorie. Caracterizarea acestora este facuta in functie de o subcategorie de fuziune $\mathcal{D}$ a lui $\mathcal{C}$, un subgroup al lui G si anumite coseturi generate de subcategoria de fuziune $\mathcal{D}$. Modul de interactiune intre aceste coseturi ramane de studiat in continuare.

A fost de asemenea inceput studiul factorizarilor algebrelor Hopf semisimple si primele rezultate in acest sens au fost publicate in articolul 1 din lista de publicatii 2.1. Se doreste realizarea unei conexiuni intre toate factorizarile posibile ale unei algebre Hopf semisimple si centralizatoarele Mueger pentru subactegoriile de fuziune generate de algebra Hopf semisimpla. O astfel de conexiune a fost realizata de Mueger in articolul in care a introdus notiune de centralizator dar doar pentru categoriile de fuziune Vec_G cu G abelian. In particular se va incerca sa se descrie factorizarile primare pentru categoriile de fuziune de tipul $\mathrm{Rep}(D(A))$. Find dat un sir exact scurt de categorii de fuziune a fost de asemenea incercata o caracterizare a catului corepunzator conform unui articol al lui Natale si Bruguieres.

De asemena folosind teoria Clifford introdusa in articolul 2 de la 2.1 s-a inceput studiul reprezentarilor irreductibile ale unui dublu quantic.

Buruiana Nicolae - În anul 2011 am abordat problema urmatoare. Se stie ca unei curbe algebrice pe o varietate abeliana i se pot atasa o serie de clase numerice in orice codimensiune analoage ciclilor Weil pe o jacobiana. Intr-o lucrare mai veche am studiat proprietatile numerice ale acestor clase iar anul acesta m-am interesat de posibile aplicatii ale formulelor obtinute acolo. In context am aratat ca pe aceasta cale se pot reobtine, in caracteristica arbitrara, teoreme ale lui Matsusaka, Hoyt si Ran. O lucrare cu aceasta tema este in curs de redactare.

Calinescu Corina - Domeniul meu curent de cercetare este in teoria vertex operator algebras si teoria reprezentarilor algebrelor Lie de dimensiune infinita. In anul 2011 am lucrat la proiectul "Vertex-algebraic structure of the standard modules for affine Lie algebras". Tehnicile folosite in acest proiect sunt din teoria operatorilor intertwining, a algebrelor comutative intertwining (abelian intertwining algebras), algebrelor Lie si teoria partitiilor.

Capatina Anca - În anul 2011 am continuat studiul comportamentului asimptotic al unor ecuaţii eliptice cu coeficienţi tare oscilanţi într-un domeniu perforat periodic cu diverse tipuri de perforaţii în fiecare perioadă şi cu condiţii diferite pe frontierele acestor perforaţii. Utilizănd metoda desfăşurării periodice, în cazul unor condiţii de tip Signorini şi, respectiv, Neumann, am demonstrat că, la limită când $\epsilon \to 0$, obţinem o ecuaţie eliptică ce conţine doi termeni adiţionali: un termen în membrul drept şi un termen "strange". Aceşti termeni capturează cele două surse de oscilaţii implicate în această problemă; mai precis, acele oscilaţii provenite din dimensiunea specială a perforaţiilor (cazul critic) cât şi acelea datorate structurii heterogene a mediului. Pe de altă parte, în problema limită, efectul de împrăştiere, datorat condiţiei unilaterale Signorini $u_\epsilon \geq 0$, poate fi resimţit prin faptul că termenul "straniu" conţine doar partea negativă a soluţiei. Aceste rezultate au fost finalizate într-un articol trimis spre publicare:

- A. Capatina, H. Ene, C. Timofte, *Homogenization results for elliptic problems in periodically perforated domains with mixed-type boundary conditions*, în **Asymptotic analysis**

De asemenea, am demarat (împreuna cu H. Ene şi C. Timofte) cercetarea unor probleme similare. Mai precis, am studiat comportamentul asimptotic pentru problema obstacolului considerănd perforaţii Signorini de aceaşi mărime cu perioada (perforaţii mari) şi perforaţii Neumann critice (perforaţii mici), obţinănd, la limită, o inegalitate variaţională. În cazul a două tipuri de perforaţii critice (mici) de tip Neumann, am arătat că problema limită este sub forma unei ecuaţii cu doi termeni adiţionali în membrul drept.

O altă direcţie a activităţii mele de cercetare a fost finalizarea monografiei despre inegalităţi variaţionale şi probleme de contact, lucrare trimisă spre publicare.

Cheptea Dorin - În anul 2011 am elaborat un articol "Determination of perturbative invariants of 3-dimensional manifolds by weight systems", care a fost trimis spre publicare la o revista ISI (Comment. Math. Helv.). De asemenea, suntem pe punctul de a finaliza articolul împreuna cu K.-M. Jacobsson de la Uppsala, la care am lucrat şi în 2010, care sperăm să fie trimis spre publicare până la sfârşitul anului.

Chiose Ionut - În anul 2011 am continuat studiul suprafeţelor de clasa VII, scopul fiind de a arata (pornind de la clasificarea suprafeţelor de rang Kähler egal cu 1) ca întotdeauna există un ciclu de curbe raţionale pe astfel de suprafeţe.

Am trimis spre publicare lucrarea *Obstructions to the Existence of Kähler Structures on Compact Complex Manifolds* la Math Z.

Chiriacescu Gabriel - În anul 2011 , am continut sa studiez suportul modulelor de coomologie locala, mai exact când acest suport este o multime Zariski inchisa a spectrului inelului de baza. Problema este inca deschisa, ea fiind strins legata de finitudinea multimii idealelor prime asociate modulelor de coomologie locala. Ultima problema a primit un raspuns negativ datorat contraexemplelor lui Singh, Katzmann, Katzmann si Swanson.
Cu toate acestea se ridica urmatoarea problema:

Problema 1 *Fie R un inel local Noetherian, M un R-modul finit generat, I un ideal al lui R si $i \geq 0$. Este $Min(Ass H^i_I(R))$ o multime finita?*

O reformulare a acestei probleme intr-un limbaj topologic, o transforma in urmatoare conjectura:

Conjectura 1 *Fie R un inel local Noetherian, M un R-modul finit generat, I un ideal al lui R si $i \geq 0$. Este Supp($H^i_I(R)$) o multime Zariski inchisa?*

Mi-am concentrat atentia asupra unei probleme inrudite si anume cand Supp($\oplus_{i\geq k} H^i_I(R)$) este o multime inchisa.

Cimpoeas Mircea - În anul 2011 mi-am continuat activitatea de cercetare pe mai multe direcţii, publicând mai multe preprinturi electronice. În lucrarea "Vertex cover algebras of simplicial multicomplexes" am introdus noţiunea de "vertex cover algebras" (algebre de acoperire cu vârfuri) pentru multicomplexe simpliciale, generalizând o noţiune introdusă de Jürgen Herzog. De asemenea, am dar o teoremă de caracterizare a acestor algebre, în cazul particular al unui multicomplex cu o singură faţetă maximală.

În lucrarea "Multigraded modules of Borel type", am generalizat noţiunea de "tip Borel" de la ideale la module multigraduate, arătând că anumite proprietăţi specifice idealelor de tip Borel se transferă şi în acest caz mai general. Într-un cadru similar, în lucrarea "Regularity of symbolic and bracket powers of Borel type ideals", am calculat explicit regularitatea pentru puterile simbolice şi puterile "bracket" pentru ideale de tip Borel.

În lucrarea "Several inequalities regarding sdepth", am dat mai multe margini pentru invariantul sdepth pentru intersecţii, sume, câturi de ideale monomiale, dar şi pentru inelele cât respective, în funţie de sdepth-ul idealelor (inelelor cât) iniţiale. Ca o consecinţă, am obţinut mai multe forme echivalente pentru conjectura Stanley. În lucrarea "A note on Stanley conjecture for monomial ideals", am demonstrat că idealele (şi inelele cât) cu un număr relativ mic de generatori verifică conjectura Stanley, extinzând rezultate similare ale altor autori. De asemenea, am dat o metodă prin care, în cazuri particulare, se poate determina dacă un ideal (cât de ideal) satisface conjectura Stanley.

Cipu Mihai - În anul 2011 m-am ocupat de ireductibilitatea polinoamelor şi de $D(-1)$–cuadrupluri.

Pólya a arătat că un polinom cu coeficienţi întregi care ia multe valori mici pentru valori întregi ale variabilei este ireductibil. Împreună cu N. C. Bonciocat şi colaboratorii de la Univ. Strasbourg Y. Bugeaud şi M. Mignotte am obţinut un analog al acestui rezultat pentru polinoame de mai multe variabile cu coeficienţi într-un corp arbitrar. Lucrarea noastră va fi publicată în *Communications in Algebra*. Constatând că cele mai multe criterii de ireductibilitate peste inelul întregilor se aplică polinoamelor unitare, am trecut la studierea polinoamelor cu coeficientul dominant supraunitar. Împreună cu aceiaşi colaboratori studiem în prezent ireductibilitatea polinoamelor cu coeficienţi întregi ce se pun sub forma $f+p^k g$, unde p este număr prim, iar g are gradul mai mare decât f.

Cealaltă problemă la care am lucrat în acest an provine de la Diofant. Se caută mulţimi de numere naturale cu proprietatea că produsul oricăror două elemente distincte ale sale este succesorul unui pătrat perfect. Se cunoaşte că o astfel de mulţime nu poate avea mai mult de patru elemente. În plus, orice $D(-1)$-cuadruplu (a, b, c, d) verifică $a = 1$, $b > 100$, $c < 10^{491}$, iar numărul lor nu poate depăşi 10^{356}. Într-o lucrare comună cu N. C. Bonciocat şi M. Mignotte am dat noi condiţii necesare pentru existenţa $D(-1)$-cuadruplurilor, între care $b > 10^{13}$ şi $\max\{10^{14}b, b^{1,16}\} < c < \min\{2.5\, b^6, 10^{148}\}$. Am arătat, de asemenea, că nu pot exista mai mult de 10^{71} de astfel de mulţimi. În prezent suntem pe cale de a confirma o conjectură a lui Dujella, potrivit căreia nu există $D(-1)$-cuadrupluri.

Coanda Iustin - În anul 2011 I. Coandă a elaborat, în colaborare cu D. Faenzi (Universitatea Pau, Franţa), lucrarea *A refined stable restriction theorem for vector bundles on quadric threefolds* (ce va fi postată, curând, pe `arXiv [math.AG]`). În această lucrare se arată că dacă E este un fibrat stabil de rang 2 pe o hipercuadrică netedă Q din spaţiul proiectiv 4-dimensional $\mathbb{P}^4$ atunci mulţimea hiperplanelor H din $\mathbb{P}^4$ pentru care restricţia lui E la secţiunea hiperplană $H \cap Q$ nu e stabilă formează, în general, o submulţime închisă de codimensiune cel puţin 2 a spaţiului proiectiv dual $\mathbb{P}^{4\vee}$. În plus, fibratele E care nu au această proprietate sunt descrise explicit. Acest rezultat rafinează o teoremă a lui L. Ein şi I. Sols [*Nagoya Math. J* 96 (1984), 11–22] în acelaşi mod în care rezultatul principal al lucrării lui I. Coandă [*J. reine angew. Math.* 428 (1992), 97–110] rafinează teorema de restricţie a lui Barth [*Math. Ann.* 226 (1977), 125–150] pentru fibrate vectoriale stabile de rang 2 pe $\mathbb{P}^3$. Lucrarea lui Coandă a fost folosită în studiul spaţiilor de moduli de fibrate de tip instanton matematic pe $\mathbb{P}^3$. Motivaţia care a stat la baza elaborării lucrării lui Coandă şi Faenzi e faptul că acesta din urmă a introdus, recent, o noţiune naturală de *fibrat instanton matematic* pe hipercuadrica din $\mathbb{P}^4$ şi, mai general, pe varietăţi Fano de dimensiune 3 cu grupul Picard ciclic.

Cobeli Cristian - În anul 2011 am studiat o serie de probleme legate în special de construcţia şi proprietăţile aritmetice, geometrice şi probabilistice ale pachetelor apoloniene de cercuri, construite recursiv prin înserări multiple.

Cojocaru Alina-Carmen - În anul 2011 activitatea mea de cercetare s-a concentrat pe studiul reducerilor modulo primi ale unui modul Drinfeld de rang arbitrar.

Coltoiu Mihnea - În anul 2011 am studiat impreuna cu Cezar Joita probleme legate de q-convexitatea acoperirii linkului, algebricitatea imaginilor de varietati proiective, conditia discului pentru acoperiri de suprafete 1-convexe.

Constantinescu Adrian - În anul 2011,

a) am obtinut o caracterizare simpla a clasei de morfisme de scheme peste un corp k, determinata anterior prin impunerea unei conditii topologice universale asupra morfismelor, pentru care proprietatea de coborare a proprietatii de a fi varietate algebrica sa aibe loc: aceasta caracterizare se bazeaza pe o restrangere la minimum a gradului de universalitate a proprietatii topologice invocate (Aceasta clasa contine morfismele universal inchise (in particular, proprii sau intregi) surjective, fidel plate, pe cele care apar in teoreme centrale de invarianti, morfismele tare submersive (definite de M. Nagata si D. Mumford), dar si pe cele universal deschise surjective - dovedite recent ca apartinand aceastei clase, s.a.). Demonstratia se bazeaza pe utilizarea de corpuri valuate.

Legat de caracterizarea de mai sus si legatura cu corpurile valuate, poate fi dat si un criteriu valuativ de recunoastere a morfismelor apartinand acestei clase.

b) am revenit asupra unor preocupari anterioare privind finit generarea subalgebrelor $\mathbb{N}$-graduate ale algebrelor de tip finit peste un corp k, motivat si de prezenta acestei probleme in abordarea Programului Mori ("Minimal Model Program"), legat de clasificarea varietatilor algebrice.

Pentru k arbitrar si subalgebre $\mathbb{N}$-graduate ale unor algebre $\mathbb{N}$-graduate de tip finit (cu graduari compatibile), poate fi formulat un criteriu algebric simplu de finit generare. Demonstratia data in acest moment este una de natura geometrica.

Pentru $k = \mathbb{C}$, se poate gasi o caracterizare pur topologica a finit generarii unei subalgebre $\mathbb{N}$-graduate A in termeni de topologii Gelfand ("fine") definite pe multimile de ideale maximale

(puncte inchise) $(ProjA)_{cl}$ si $(SpecA_0)_{cl}$ - topologii definite si introduse anterior de noi : *A este finit generata daca si numai daca* $(SpecA_0)_{cl}$ *este local compacta, morfismul canonic* $(ProjA)_{cl} \to (SpecA_0)_{cl}$ *este propriu* (ambele conditii relativ la topologiile Gelfand), *iar* $ProjA$ *este o schema cuasicompacta* (in raport cu topologia Zariski). Daca $dimA \leq 2$ sau $A_0 = \mathcal{C}$, ultima conditie, de cuasicompacitate, poate fi omisa. Ramane de stabilit daca acest lucru este posibil in general, pentru A arbitrar. Acest rezultat permite o demonstratie simpla, in cazul $k = \mathbb{C}$, a unei teoreme foarte uzitate a lui Zariski si poate fi aplicat direct si la "result of Zariski and Constantinescu" (MR1836861 (2002e:14022)).

Constantinescu Alexandru - În anul 2011 am lucrat în colaborare cu Matteo Varbaro (Universitá di Genova) la probleme care leagă algebra comutativă de combinatorică. În particular, ne-am ocupat de o conjectură propusă de R. Stanley. Această conjectură pune în legatură h-vectorii idealelor definite de matroizi (un invariant algebric) cu O-şiruri pure (*Engl.: pure O-sequences*) - un obiect pur combinatoric. Această problemă a fost intens studiatâde mai mulţi cercetatori în ultimii ani (vezi J. Migliore, U. Nagel, M. Boij et al.). Împreună am reusit să demonstrăm conjectura in mai multe cazuri semnificative. În plus am făcut acest lucru folosind o abordare complet nouă a problemei.

Tot în 2011 am colaborat cu Elisa Gorla şi Matey Mateev (ambii Universität Basel). Împreună am studiat interacţiile dintre obiecte algebrice cu o structură combinatorică subadiacentă şi *liaison theory* (o teorie de clasificare în geometria proiectivă). În particular ne-am ocupat de două probleme. Prima se referă la legătura dintre ideale torice definite de grafuri şi intersecţii complete. A doua problemă constă în descrierea unor invarianţi numerici algebrici (funcţia Hilbert şi numerele Betti) ai varietăţilor determinantale standard. În acest caz *liaison theory* este principalul instrument de studiu.

Daia Liviu - În perioada scursa de la precedentul raport de activitate am studiat problema invarianţei la imaginea inversă a quasi-b-funcţiilor în sensul lui Laurent în categoria $\mathcal{D}_X$-modulelor olonome.

Mai precis, fie mai întâi X o varietate complexă, $\mathcal{O}_X$ fasciculul funcţiilor olomorfe pe X, şi $\mathcal{D}_X$ fasciculul operatorilor diferenţiali cu coeficienţi în $\mathcal{O}_X$. Fie $\varphi = (\varphi_1, \ldots, \varphi_d)$ o aplicaţie colomorfă a lui X în $W = \mathbb{C}^d$ şi $m_1, \ldots, m_d \in \mathbb{N}^*$ prime între ele. Definim o filtrare pe $\mathcal{O}_X$ prin:

$$V_k^{\varphi}\mathcal{O}_X = \sum_{<m,\alpha>=-k} \mathcal{O}_X \varphi^{\alpha} \tag{1}$$

cu $\alpha \in \mathbb{N}^d$, $< m, \alpha >= \sum m_i\alpha_i$ şi $\varphi^{\alpha} = \varphi_1^{\alpha_1} \cdots \varphi_d^{\alpha_d}$. Pentru $k \geq 0$ punem $V_k^{\varphi}\mathcal{O}_X = \mathcal{O}_X$. Această filtrare se extinde la o filtrare pe $\mathcal{D}_X$:

$$V_k^{\varphi}\mathcal{D}_X = \left\{ P \in \mathcal{D}_X \;\middle|\; PV_l^{\varphi}\mathcal{O}_X \subset V_{l+k}^{\varphi}\mathcal{O}_X,\ (\forall) l \in \mathbb{Z} \right\} \tag{2}$$

Notăm cu Θ_X fasciculul câmpurilor de vectori pe X. **Definiţie.** Numim (φ, m)-*câmp de vectori Euler cu ponderi pe* X un câmp η pe X astfel încât:

- $\eta(\varphi_i) - m_i\varphi_i \in V_{-m_i-1}^{\varphi}\mathcal{O}_X$ pentru $i = 1, \ldots, d$, şi
- $\eta \in \sum_i \varphi_i \Theta_X$.

Definiţie. Fie $\mathcal{M}$ un $\mathcal{D}_X$-modul coerent, şi fie $V^{\varphi}\mathcal{M}$ o $V^{\varphi}\mathcal{D}_X$-filtrare bună. Un polinom $b \in \mathbb{C}[X]$ se numeşte *quasi-b-funcţie de tip* (φ, m) *pe* $V^{\varphi}\mathcal{M}$ dacă există un (φ, m)-câmp de vectori Euler cu ponderi η astfel încât:

$$b(\eta + k)V_k^{\varphi}\mathcal{M} \subset V_{k-1}^{\varphi}\mathcal{M}, \quad (\forall) k \in \mathbb{Z}. \tag{3}$$

Considerăm acum două aplicaţii olomorfe $\varphi\colon X \longrightarrow W = \mathbb{C}^d$ şi $\varphi'\colon X' \longrightarrow W' = \mathbb{C}^{d'}$, şi fie $m_1, \ldots, m_d, m'_1, \ldots, m'_{d'} \in \mathbb{N}^*$. Fie $f\colon X' \longrightarrow X$ şi $F\colon W' \longrightarrow W$ aplicaţii olomorfe astfel încât $\varphi \circ f = F \circ \varphi'$, şi presupunem că F este un polinom quasi-omogen, adică $F = (F_1, \ldots, F_d)$ cu $F_i\big(\lambda^{m'_1} x_1, \ldots, \lambda^{m'_{d'}} x_{d'}\big) = \lambda^{m_i} F_i(x_1, \ldots, x_{d'})$. Dacă $\mathcal{N}$ este un $\mathcal{D}_X$-modul, imaginea sa inversă este:

$$f^+\mathcal{N} = O_{X'} \otimes_{f^{-1}O_X} f^{-1}\mathcal{N} = \mathcal{D}_{X'\to X} \otimes_{f^{-1}\mathcal{D}_X} f^{-1}\mathcal{N} \tag{4}$$

unde $\mathcal{D}_{X'\to X}$ este $\big(\mathcal{D}_{X'}, f^{-1}\mathcal{D}_X\big)$-bimodulul $\mathcal{O}_{X'} \otimes_{f^{-1}\mathcal{O}_X} f^{-1}\mathcal{D}_X$. Dacă $\mathcal{N}$ are o V^φ-filtrare, atunci aceasta induce o $V^{\varphi'}\mathcal{D}_{X'}$-filtrare pe $f^+\mathcal{N}$ prin

$$V_k^{\varphi'} f^+\mathcal{N} = \sum_{i+j=k} V_i^{\varphi'}\mathcal{D}_{X'\to X} \otimes f^{-1}V_j^{\varphi}\mathcal{N}. \tag{5}$$

Conjectură. Dacă $\mathcal{N}$ este olonom, η' este un (φ', m')-câmp Euler cu ponderi pe X' şi η este un (φ, m)-câmp Euler cu ponderi pe X astfel încât $\eta = f * \eta'$, şi dacă $V^\varphi\mathcal{D}_X$-filtrarea pe $\mathcal{N}$ este bună, atunci $V^{\varphi'}\mathcal{D}_{X'}$-filtrarea pe indusă pe $f^+\mathcal{N}$ este bună, şi un polinom $b \in \mathbb{C}[X]$ este o quasi-b-funcţie de tip (φ, m) pentru filtrarea lui $\mathcal{N}$ în η dacă şi numai dacă b este o quasi-b-funcţie de tip (φ', m') pentru filtrarea lui $f^+\mathcal{N}$ în η'.

Rezultatul este cunoscut în cazul în care f este submersie şi $m_1 = \ldots = m_d = m'_1 = \ldots = m'_{d'} = 1$. Adaugarea ponderilor permite slăbirea ipotezei de sumbersie. În cazul în care $\mathcal{N}$ este numai coerent, $f^+\mathcal{N}$ nu este neapărat coerent. Dacă $\mathcal{N}$ este însă olonom atunci $f^+\mathcal{N}$ este şi el olonom, şi în acest caz conform unui rezultat al lui B. Malgrange $\mathcal{N}$ admite şi filtrări bune globale. Ipoteza de olonomie pare deci a fi necesară.

Dan Nicusor - In anul 2011 cercetarile mele s-au concentrat pe compararea formulelor explicite din articolele precedente "Sur la conjecture de Zagier pour $n = 4$. I" si "Sur la conjecture de Zagier pour $n = 4$. II", in care am obtinut formule diferite prin care un polilogaritm multiplu de pondere 4 general se scrie ca o combinatie liniara explicita de polilogaritmi multipli de tip $(3, 1)$ si polilogaritmi de pondere 4. Compararea celor doua formule explicite da o combinatie liniara explicita intre polilogaritmi multipli de tip $(3, 1)$ si polilogaritmi de pondere 4. Aceasta relatie s-a dovedit a fi prea dificila pentru a fi inteleasa conceptual. Am studiat diferite specializari ale acestei formule si relatiile dintre ele. Nu am reusit insa sa gasesc din combinatii liniare ale acestora ecuatia functionala conjecturala de acelasi tip care implica conjectura Zagier pentru $n = 4$.

David Liana - În anul 2011 mi-am continuat activitatea de cercetare in domeniul geometriei diferentiale. Mai precis, am lucrat pe tema structurilor Frobenius si a F-varietatilor, pe tema formelor conforme-Killing pe varietati cuaternionice-Kahler si pe tema structurilor complexe generalizate. Astfel, am elaborat impreuna cu Prof. Ian A. B. Strachan de la Universitatea din Glasgow o lucrare despre simetriile F-varietatilor (vezi arxiv:1103.2045). F-varietatile au fost introduse de catre C. Hertling si Y. Manin si sunt strans legate de varietatile Frobenius. De asemenea, ele apar in mod natural in teoria singularitatilor. O F-varietate este o varietate (reala sau complexa) M dotata cu o multiplicare asociativa, comutativa, cu unitate pe fibratul tangent TM, ce satisface o anumita conditie de integrabilitate. Intr-un articol precedent (Adv. Math. 2011) am dezvoltat o dualitate pentru F-varietati. In acesta lucrare, am studiat interactiile dintre aceasta dualitate si diverse simetrii ale F-varietatilor, cum ar fi transformatele Legendre.

In lunile aprilie - mai - iunie 2011 am dezvoltat, impreuna cu Prof. D.V. Alekseevsky, o descriere explicita completa a structurilor complexe generalizate invariante pe (toate) grupurile Lie semisimple (nu neaparat compacte).

Deliu Dragos - In anul 2011 am terminat proiectul de doctorat, cu lucrarea cu titlul "Homological Projective Duality for Gr(3,6)". In aceasta teza descriu urmatorul caz in care HPD nu a fost inteles, iar ca aplicatii mentionez obtinerea unei descrieri a unei varietati Calabi-Yau care apare din intersectia Gr(3,6) cu sase hiperplane, rezultat interesant in fizica si in sine, pentru ca descrie de fapt ultima varietate CY care apare ca intersectie completa in Grassmannieni.

In acelasi timp, folosind tehnici noi de varietati torice dar si un articol de fizica (rezultate care in curand vor fi demonstrate complet matematic de un coleg), lucrez impreuna cu niste colegi la alte aplicatii/constructii pentru "homological projective dual varieties". Acest proiect este inca in progres, dar avem rezultate partiale pentru produse de spatii proiective. Printre aplicatii obtinem descrieri ale categoriilor derivate pentru asa numite varietati Fano de tip Calabi-Yau.

Diaconescu Razvan - În anul 2011 am continuat activitatea de cercetare în domeniul teoriei instituţionale a modelelor cu aplicaţii în informatică. Principalele probleme la care am lucrat sunt următoarele:

1. Hibridizare de instituţii.

2. Semantică iniţială pentru instituţii hibridizate.

3. Translatări ale instituţiilor hibridizate in logica de ordinul I.

Diaconu Calin Adrian - În anul 2011 am finalizat lucrarea *Trace Formulas, Character Sums, and Multiple Dirichlet Series* în colaborare cu Vicenţiu Paşol. Aceasta reprezintă o primă parte dintr-un proiect pe termen mai lung în care stabilim pentru prima dată o legătură între *Teoria Seriilor Dirichlet Multiple, Geometria Aritmetică* şi *Formule de Urmă*.

Dinu Florin Liviu - Continuarea studiului a **doua tipuri de interactiuni de tip gazodinamic**: o interactiune *şoc-turbulenţă* si o interacţiune regulată *wave-wave*. **Interacţiune şoc-turbulenţă.** Extindere a demersului Fourier neliniarizat elaborat intr-o formă deja semnificativă in 2010. Din punct de vedere constructiv extinderea consideră o *completare modală* [de sunet] a turbulenţei incidente intr-o interaţiune şoc-turbulenţă. Investigăm *persistenţa* caracterului clasifiant al reprezentărilor obţinute pentru soluţia de interacţiune prin extinderea menţionată.

Interacţiune regulata wave-wave. Două demersuri analitice sunt folosite respectiv pentru a construi două perechi semnificative şi *analoage* de clase de soluţii [o pereche izentropică şi, respectiv, o pereche anizentropică (de un tip particular)]. Fiecare dintre perechile menţionate alatură o clasă de elemente "wave" unei clase de elemente de interacţiune regulată "wave-wave". *paralelă clasifiantă* este construită intre cele doua perechi analoage de clase − punând in evidenţă existenţa unor consonanţe şi, pe de altă parte, a unor contraste puternic netriviale. In cazul izentropic este considerată importanţa clasifiantă a identificării unui "nivel" de neliniaritate veritabilă.

Dragan Vasile - În anul 2011 activitatea de cercetare stiintifica desfasurata de mine poate fi structurata in cateva directii principale.
1. **Problema filtrarii (estimarii) unui semnal.**
Problema estimarii unui semnal $z(t)$ in conditiile in care sunt disponibile masuratori ale valorilor altui semnal $y(t)$ are o istorie lunga in domeniul controlului optimal si al procesarii semnalelor. Atat semnalul care trebuie estimat $z(t)$ cat si semnalul masurat $y(t)$ sunt iesiri ale unui sistem

dinamic $\mathbf{G}$ care este supus unor perturbatii aditive $v(t)$. Semnalul $\hat{z}(t)$ care trebuie sa estimeze pe $z(t)$ reprezinta iesirea unui sistem dinamic $\mathbf{G}_F$ (adesea numit filtru) care este alimentat la intrare cu valorile masurate $y(s), 0 \leq s \leq t$. Daca perturbatia aditiva $\{v(t)\}_{t\geq 0}$ este modelata de un proces Wiener atunci problema de filtrare a iesirii e cunoscuta sub numele de "filtrare de tip H_2". In cazul in care perturbatia aditiva $\{v(t)\}_{t\geq 0}$ este modelata de un proces cu energie totala finita, problema de filatrare este cunoscuta sub numele de "filtrare de tip H_∞".

Bazat pe experienta dobandita in studiul unor probleme de control pentru sisteme lineare stochastice, am abordat unele aspecte ale problemei fltrarii de tip H_2 pentru sisteme avand reprezentarea in spatiul starilor descrisa de ecuatii differentiale sau cu differente perturbate de zgomot alb multiplicativ. Astfel, in colaborare cu prof. dr. A.M. Stoica, de la Universitatea Politehnica Bucuresti, am studiat problema constructiei unui filtru a carui iesire $\hat{z}(t)$ sa furnizeze o "cea mai buna estimare" a iesirii unui sistem modelat de ecuatii differentiale de tip Ito cu zgomot alb multiplicativ si aditiv in conditiile in care sunt disponibile doar masuratori ale iesirii $y(\cdot)$ la momente discrete de timp $t_k = kh, k = 0, 1, ..., (h > 0$ fiind perioada de esantionare). Rezultatele obtinute au fost cuprinse in lucrarea V. Dragan, A. M. Stoica- "Optimal H_2 Filtering for a Class of Linear Stochastic Systems with Sampling", care a fost trimisa spre publicare la revista Automatica.

Am studiat de asemenea problema estimarii unui semnal generat de un sistem dinamic in timp discret cu coeficienti periodici afectat de perturbatii de tip zgomot alb multiplicativ si aditiv. Rezultatele obtinue au fost cuprinse in lucrarea V. Dragan, Optimal filtering for a class of discrete-time linear stochastic systems with periodic coefficients", care a fost trimis spre publicare la IEEE Trans. on Automatic Control. In colaborare cu dr. S. Aberkane de la CRAN CNRS UMR, Universit Henri Poincar, Nancy, France, am studiat o problema de filtrare de tip H_∞ pentru sisteme in timp discret cu coeficienti periodici perturbat de un lant Markov neomogen cu un numar finit de stari.

Rezultatele obtinute au fost cuprinse in lucrarea S. Aberkane, V. Dragan, "H_∞ Filtering of Periodic Markovian Jump Systems: Application to Filtering with Communication Constraints".

2) **Probleme de control optimal de tip H_2 pentru sisteme stochastice in timp discret.**

Ca o continuare a cercetarilor din anii precedenti am realizat in colaborare cu dr. T. Morozan lucrarea: V. Dragan, T. Morozan,"H_2 optimal control for a class of discrete-time linear stochastic systems with periodic coefficients", care a fost trimisa spre publicare la IEEE Trans on Automatic Control. In acest context am aratat ca in cazul sistemelor in timp discret cu coeficienti periodici perturbate de un lant Markov cu un numar finit de stari valoarea normelor de tip H_2 este in mod esential afectata de existenta sau nonexistenta limitei $\lim_{t\to\infty} P^t$, P fiind matricea probabilitatilor de trecere ale lantului Markov. Acesta pare un fapt surprinzator si credem ca el este specific cazului sistemelor care evolueaza in timp discret.

3) **Sisteme stochastice cu perturbatii singulare.**

In colaborare cu dr. H. Mukaidani de la Universitatea din Hiroshima, Japonia, am realizat lucrarile: V. Dragan, H. Mukaidani , Stabilizing Composite Control for Systems Modeled by Singularly Perturbed Ito Differential Equations with Two Small Time Constants, Vasile Dragan, Hiroaki Mukaidani, Peng Shi, Near optimal linear quadratic regulator for a class of stochastic systems modeleld by sngularly perturbed Ito differential equations with state and control multiplicative white noise, care vor fi prezentate la a 50-a IEEE Conference on Decision and Control and European Control Conference, care va avea loc in Orlando, Florida, USA in December 12-15, 2011, respectiv la a VI-a ICICIC Conference (The Sixth International Conference on Innovative Computing, Information and Control (ICICIC2011)) care va avea loc in Decembrie

22-24, 2011, la Kitakyushu, Japan.

Dumitrescu Olivia - În anul 2011 am continuat activitatea de postdocorant anul 2 in cadrul University of California, Davis. Momentan interesul meu cuprinde urmatoarele teme: Teorie Gromov-Witten, Minimal Model Program / Teorie Mori, Geometrie Torica, Probleme de Interpolare, Conjenctura lui Nagata.

Enescu Florian - În anul 2011 am continuta munca de cercetare pe probleme de coomologie locala, multiplicitati Hilbert-Kunz si F-signatura inelelor locale.

Epure Mihai - În anul 2011 am redevenit doctorand al Scolii Doctorale de Matematica din cadrul Universitatii din Bucuresti sub indrumarea stiintifica a Prof. Dr. Dorin Mihail Popescu. A sustine o teza de doctorat in anul 2012 este acum un scenariu realist. In sustinerea acestei afirmatii mentionez ca pe data de 3 octombrie 2011 am trimis spre publicare un articol realizat in colaborare cu Conf. Dr. Tiberiu Dumitrescu si cu doctorandul Zaheer Ahmad la revista cotata ISI Bulletin Mathematique de la Societe des Sciences Mathematiques de Roumanie. Un preprint electronic al lucrarii este atasat sub forma unui pdf la emailul prin care am trimis prezentul raport. In momentul cand o sa apara si pe http://arxiv.org/ o sa revin cu informatia necesara. De asemenea, un al doilea articol scris in aceeasi directie si de aceeasi echipa este intr-un stadiu avansat de realizare.Am fost zilnic prezent la prezentari sustinute in cadrul celui de-al 7-lea Congres al Matematicienilor Romani organizat la Brasov in perioada 29 iunie-5 iulie. Am participat si la toate prezentarile din cadrul Scolii Nationale de Algebra (19-23 septembrie, editia a XIX-a).

Faciu Cristian • Teme studiate:

1. A fost studiată structura undelor de şoc şi a interfeţelor ce se pot propaga într-un material termoelastic ce poate suferi schimbări de fază induse de condiţii de impact. Structura acestora a fost analizată în cazul în care mecanismele de regularizare sunt descrise de conducţia termică şi de timpul de relaxare al materialului. Astfel au fost determinate condiţii de existenţa şi unicitate ale undelor progresive (traveling waves). Aceste condiţii furnizează un criteriu de selecţie al soluţiilor problemelor lui Riemann şi Goursat în teoria adiabatică a termoleasticităţii. S-a arătat că acest criteriu este criteriul corzii în raport cu curba lui Hugoniot în spaţiul tensiune-deformatie. Rezultatele astfel obţinute privind aspectele termodinamice şi condiţiile de admisibilitate au fost publicate sub forma unui preprint. Partea a doua a acestui studiu este dedicată unei investigaţii numerice în cazul unui material termo-elastic ce poate descrie comportarea unui aliaj cu memoria formei.

   Lucrare in curs de redactare:
   Cristian Făciu and Alain Molinari : *The structure of shock and interphase layers for a heat conducting Maxwellian rate-type approach to solid-solid phase transitions. Part II: Numerical study for a SMA alloy.*

2. In cadrul Proiectului PN-II-PPCE-ID-100/2010 a fost studiată tema: "Modelarea instabilităţilor termo-mecanice care insoţesc fenomene de localizare a deformaţiei în materiale metalice. Aplicaţii la efectul Portevin-LeChatelier." Lucrare în curs de redactare:
   Cristian Făciu and Mihaela Suliciu : *On the dynamics of strain bands nucleation and their themal behavior using a viscoplastic theory based on overstress*

• Referent în comisia de doctorat a d-lui Emilian Bulgariu cu titlul "Studiul unor modele generalizate în mecanica mediilor continue" (conducător ştiinţific Prof. Stan Chiriţa, Univ. Al. I. Cuza din Iaşi)

Fulger Mihai- În anul 2011 am terminat anul 4 şi am început anul 5 de doctorat la University of Michigan - Ann Arbor, sub îndrumarea lui Robert Lazarsfeld. În prezent aplic pentru programe post-doctorale.

Am finalizat lucrul la articolul care va fi în esenţă teza mea de doctorat, volume locale. Am definit si studiat o noţiune de volum pentru divizori Cartier pe eclatari de varietăţi normale cu un punct distins. Această entitate generalizează două noţiuni distincte in geometria algebrică:

- Noţiunea de multiplicitate Hilbert-Samuel pentru ideale m-primare în inele normale de dimensiune cel puţin 2.
- Volumul definit de J. Wahl pentru singularităţi izolate de suprafeţe complexe normale.

În prezent studiez, într-un mod asimptotic, descompunerea în reprezentări ireductibile pentru acţiunea lui $GL_{n+1}(\mathbb{C})$ pe syzygy-urile liniare determinate de scufundări Veronese ale spaţiilor proiective.

Gaba Radu - In anul 2011 am facut cercetari in colaborare cu Bogdan Canepa in teoria curbelor eliptice, ocupandu-ma de problema clasificarii unor clase speciale de curbe eliptice complexe. Acestea au facut obiectul unui preprint electronic pe care l-am postat pe arXiv urmand a-l trimite spre publicare.

Gheondea Aurelian - În anul 2011 am studiat probleme de scufundări închise de spaţii Hilbert, dilatări de nuclee invariante la acţiuni de semigrupuri cu involuţie, estimări ale entropiei topologice pentru scheme de aproximare, precum şi probleme legate de spaţii Sobolev cu ponderi.

Ghergu Marius - În anul 2011 am studiat ecuaţii eliptice de ordin superior care admit soluţii singulare. Am fost interesat in special de operatorul poliharmonic Δ^m, $m \geq 1$. In aceasta direcţie am obţinut estimări *a priori* pentru soluţiile de clasă C^{2m}. De asemenea am obţinut unele rezultate legate de sisteme Lane-Emden cu date singulare al cărei model este $\Delta u + u^p = 0$.

O altă direcţie de cercetare in anul 2011 o constituie studiul soluţiilor explozive în întreg spaţiul $\mathbf{R}^N$, $N \geq 3$. Am obţinut aici rezultate de existenţă şi unicitate pentru astfel de soluţii.

Gologan Radu - În anul 2011 am continuat cercetările legate de modelul Lorenz bidimensional, făcînd o legătură cu rezultate legate de distribuţia numerelor Farey cu numă rători cşi numitori ce dau resturi prescrise la împărţirea cu un număr prim dat. Am elaborat lucrarea "A billiard model in the plane close to the Lorez model"

Grecea Valentin - In 2011 am inceput studiul excursiilor in cadrul general dat de procesul Markov canonic asociat unui semigrup Ray pe un spatiu al starilor local compact cu baza numarabila. Am pus in evidenta un rezultat tehnic general privind progresivitatea (in masurabilitate) pentru procesul puctual canonic al excursiilor in afara unei multimi date J din spatiul starilor, in raport cu filtratia asociata unei familii crescatoare de timpi de oprire T(t) (in raport cu filtratia canonica si satisfacand o proprietate).

Ichim Bogdan - În anul 2011 am continuat dezvoltarea programului de algebra computerizata Normaliz. A fost lansate o noua versiune: Normaliz 2.7 care contine support complet pentru procesare paralele, rezolvarea sistemelor de inegalitati, ecuatii si congruente lineare precum si multiple imbunatatiri algoritmice. De asemenea a fost lansata interfata grafica jNormaliz 1.1.

Ignat Liviu - În anul 2011 activitatea de cercetare a fost concretizata prin obtinerea unor inegalitati de tip Carleman pentru ecuatiile caldurii si Schrödinger. Aceste rezultate duc la obtinerea unor rezultate pozitive din punctul de vedere al problemelor inverse. De asemenea a fost continuata analiza proprietatilor de dispersie pe structuri de tip arbore cu diferite conditii de cuplare.

Ionescu-Kruse Delia - În anul 2011 am investigat dinamica fluidului la propagarea undelor gravitaţionale periodice 2-dimensionale peste domenii infinit adânci. Pentru undele de amplitudine mică, am găsit soluţiile analitice ale ecuaţiilor diferenţiale neliniare ce descriu mişcarea particulelor aflate pe şi dedesubtul suprefeţei libere, la propagarea unor astfel de unde. Am arătat că traiectoriile obţinute nu sunt curbe închise. Anumite soluţii sunt de tip "peakon", altele se exprimă cu ajutorul funcţiilor eliptice Jacobi sau cu ajutorul funcţiilor hipereliptice. O caracteristică surprinzătoare ce apare din studiul anumitor soluţii ar putea oferi o buna înţelegere a fenomenului "wave-breaking".

Aproximaţiile ecuaţiilor lui Euler pentru un fluid ideal incompresibil 2-dimensional aflat într-un câmp gravitaţional constant, au condus la multe ecuaţii neliniare interesante. În 2011 am studiat sistemul de doua ecuaţii neliniare Camassa-Holm (two-component Camassa-Holm system), modul în care acest sistem apare ca o aproximaţie a ecuaţiilor lui Euler la propagarea undelor de suprafaţă în ape puţin adânci şi deducerea lui printr-o metodă variaţională în cadrul formalismului lagrangian. Lagrangianul folosit în derivarea variaţională nu este o metrică.

Ionescu Paltin - În anul 2011 am continuat cercetarile, impreuna cu F. Russo, asupra geometriei varietatilor riglate si asupra celor defective (cu defect dual sau cu defect secant).

Ionescu Paul Cristodor - În anul 2011 am continuat activitatea de cercetare in cadrul Algebrei Comutative, in principal pe 3 directii:
a) Studiul invariantilor omologici ai morfismelor de inele locale noetheriene, in special deviatiile André ale unui astfel de morfism;
b) Studiul proprietatilor de echidimensionalitate ale fibrelor unui morfism de inele locale noetheriene;
c) Studiul unei clase speciale de inele locale, inelele aproape Cohen-Macaulay, clasa introdusa de catre M.C. Kang;

In fiecare dintre aceste direcţii este in curs de definitivare cate o lucrare, care va fi trimisă spre publicare in cursul anului 2012.

Iordanescu Radu - In prima parte a anului 2011 am elaborat un articol de sinteza foarte amplu (171 pagini) intitulat "Jordan Structures in Mathematics and Pysics" (arXiv:1106.4415v1 [math.DG]),cu o bibliografie de peste 1.240 de titluri, pe care l-am facut cunoscut - impreuna cu cartea mea din 2009 si Proceedings Iasi 2009 - si la conferintele la care am participat ulterior, anume:

1. Congresul Matematicienilor Romani de la Brasov (iunie-iulie),

2. Conferinta franco-romana de geometrie complexa de la IMAR (iulie),

3. Conferinta “Nonassociative algebras and related topics” din Portugalia (iulie) - pt.detalii a se vedea raportul meu din 3 aug.,

4. Conferinta “Finsler extensions of relativity theory” de la Brasov (august - septembrie),

5. Al 10-lea WORKSHOP de geometrie diferentiala si aplicatiile sale de la Constanta (august),al carui principal organizator am fost,

6. Conferinta de geometrie diferentiala si sisteme dinamice din Bucuresti (octombrie),

7. Conferinta AGMP-7 din Franta (octombrie) - pt.detalii a se vedea raportul meu din 31 oct.,

8. “Zilele Matematice Bacaoane” (octombrie),

9. Conferinta “Non Associtive Algebra and its Applications” din Spania (noiembrie) - pt. detalii a se vedea raportul meu din 7 noiembrie.

Mentionez ca la Mulhouse (Franta) am fost solicitat (si am acceptat) sa prezidez “invited plenary lectures” (fiind singurul participant roman in aceasta situatie), iar la Zaragoza (Spania) am fost singurul participant din Romania. In urma discutiilor stiintifice purtate cu numerosi participanti la conferintele mentionate mai sus,am inceput elaborarea versiunii a 2-a a lucrarii mele foarte recente din arXiv. Sunt invitat in Franta (la o data care se va stabili ulterior) in cursul anului 2012.

Joita Cezar - În anul 2011 am studiat proprietati de convexitate analitica pentru acoperiri de spatii 1-convexe, in special proprietatea discului precum si proprietati ale spatiilor complexe care sunt imagini de varietati proiective prin aplicatii proprii cu fibre echi-dimesnionale.

Leustean Laurentiu - În anul 2011 am abordat următoarele direcţii de cercetare:

- aplicarea tehnicilor de “proof mining” pentru a obţine versiuni finitare ale unor rezultate din teoria ergodică neliniară ale căror demonstraţii folosesc limite Banach.

- studiul funcţiilor “firmly nonexpansive” în spaţii geodesice.

Lozovanu Victor - În anul 2011 am continuat activitatea mea de cercetare la Queen’s University, Kingston, Canada ca Coleman Post-Doctoral Fellow. In acest an cea mai importanta directie este colaborarea cu profesorul Greg G. Smith de la Queen’s, concentrata pe problema generalizarii teoremei de anulare al lui Kodaira in orice codimensiune. Acest proiect este in ultimul stadiu de finalizare si amandoi speram ca pana la finele lunii decembrie sa putem afisa pe arxiv.org rezultatele noastre comune. In ultima luna am inceput sa lucrez si cu profesorul Mike Roth de la aceeashi universitate. Deocamdata nu avem rezultate concrete, demne de a fi mentionate. Un alt proiect, care se afla in ultimul stadiu de finalizare, este in comun cu Alex Küronya de la Albert-Ludwigs-Universität Freiburg, Germania si cu Dave Anderson de la University of Washington, Seattle, SUA. In acest proiect cautam conditii globale pentru fibrate in linii care sa aiba corpuri Newton-Okounkov poliedrale. Speram ca pana la finele lunii decembrie si acest proiect sa fie afisat pe arxiv.org. In alta ordine de idei, la recomandarea profesorului Tony Geramita de la Queen’s am inceput sa fac munca de redactare la Journal of Pure and Applied Algebra unde profesorul Geramita este editor.

Maican Mario - În anul 2011 am studiat spaţiile de moduli pentru fascicolele de dimensiune 1 şi multiplicitate mică pe planul proiectiv complex. Rezultatele obţinute se pot găsi în lucrarea aceptată la publicat, vezi mai jos, şi în cele două lucrări menţionate la "preprinturi electronice" mai jos. În esenţă, am descris fascicolele care apar în toate spaţiile de moduli de multiplicitate 5 şi în doua dintre spaţiile de multiplicitate 6. Am găsit stratificări ale acestor spaţii, straturile fiind obiecte geometrice concrete.

Manolache Nicolae - Lucrările analizate în 2011, până astăzi, (ca cercetare, dar într-o redactare în curs de îmbunătăţire) sunt *Globally Generated Vector Bundles on* $\mathbb{P}^3$ *with* $c_1 = 3$ şi *Globally Generated Vector Bundles on* $\mathbb{P}^n$ *with* $c_1 = 3$ (cea din urmă în colaborare cu Cristian Anghel). Pentru conformitate ataşez prima lucrare (cu rugămintea expresă de a nu fi făcută publică, dat fiind stadiul ei preliminar, cu stângăcii de diferite naturi). Lucrările vor fi accesibile în curând pe arXiv. Spre publicare în revista va fi propusă a doua, dar cu rezultatele din prima integrate.

Matei Daniel - În anul 2011 am lucrat in principal la doua proiecte de cercetare legate de contracte din cadrul programului Idei al PNII. Mai precis proiectele "Conexiuni, stabilitate si aplicatii in geometria algebrica, topologie si teoria grupurilor" (St.Papadima) si "Invarianti geometrici si cuantici ai varietatilor de dimensiune 3 si aplicatii" (S.Moroianu). Deasemenea am fost implicat in proiectul "Metode algebrice in probabilitati si statistica" finantat de Lea-MathMode.

In cadrul primului proiect temele studiate au fost:

1. Grupuri fundamentale de orbi-varietati algebrice. In colaborare cu E. Artal si J. Cogolludo (Universitatea din Zaragoza, Spania) am generalizat o teorema a lui F. Campana asupra varietatilor de salt Green-Lazarsfeld de la orbi-varietati algebrice compacte la orbi-varietati quasi-proiective.

2. Grupuri fundamentale quasi-proiective si nuclee Artin. In colaborare cu E. Artal si J. Cogolludo (Universitatea din Zaragoza, Spania) am studiat realizarea algebro-geometrica a unor subgrupuri de index infinit ale grupurilor Artin.

In cadrul celui de-al doilea proiect tema a fost: Homologia acoperirilor de varietati. In colaborare cu E. Artal si J. Cogolludo am obtinut o generalizare a formulelor lui Sakuma pentru primul numar Betti al unei acoperiri abeliene finite la cazul acoperirilor de orbi-varietati.

In cadrul celui de-al treilea proiect tema a fost: Retele multidimensionale si calculul reziduurilor. In colaborare cu F. Avram de la Universitatea din Pau, Franta am obtinut rezultate asupra functiei generatoare a distributiei unei retele, exprimand coeficientii acesteia in termeni de reziduuri definite pe complemente de hipersuprafete algebrice.

Maxim Laurentiu - În anul 2011, activitatea mea de cercetare a constat in a inţelege efectul pe care singularitaţile îl au asupra proprietatilor analitice si topologice ale varietaţilor algebrice complexe. In particular, am fost interesat de teorii de clase caracteristice pentru varietaţi *singulare*, si de aspectele lor computaţionale. De exemplu, calcularea acestor clase caracteristice in cazul produselor simetrice, a spaţiilor de configuraţii, si a schemelor Hilbert de puncte asociate unei varietaţi algebrice, sau in cazul hipersuprafeţelor algebrice si a intersecţiilor complete a ocupat un loc important in proiectele mele de cercetare.

Macinic Anca - În anul 2011 tematica mea de cercetare s-a situat in liniile tezei de doctorat, explorand potentiale directii de generalizare a rezultatelor obtinute acolo.

Mihailescu Eugen - În anul 2011 am studiat diferite probleme actuale si de interes pe plan mondial, in teoria sistemelor dinamice si teorie ergodica, cat si aplicatii ale acestora in alte domenii (de exp. Fizica statistica). In articolul On a class of stable conditional measures, Ergodic Theory and Dynamical Systems, 2011, am studiat masurile conditionale induse de o masura de echilibru pe o partitie masurabila subordonata varietatilor locale stabile. In acest fel am demonstrat ca masurile conditionale induse de masura de echilibru a unui potential stabil sunt masurile de dimensiune maximala pe varietatile stabile, raspunzand astfel unei probleme a lui Barreira. In articolul Asymptotic distributions of preimages for endomorphisms, Ergodic Th. And Dynam. Syst., 2011, am studiat diferite limite de masuri probabilistice obtinute cu ajutorul preimaginilor pentru endomorfisme speciale. In unele cazuri am gasit masuri inverse SRB, care satisfac si o formula de tip Pesin pentru entropia de masura, folding entropy si coeficientii Liapunov negativi. In articolul Local geometry and dynamical behavior on folded basic sets, J. Stat. Physics, 2011, am gasit legaturi surprinzatoare intre geometria unor fractali folded si dimensiunea stabila. Astfel am aratat ca daca dimensiunea stabila este zero, atunci fractalul se gaseste intr-o varietate locala instabila, iar functia respectiva este expanding. Deasemenea am dat o caracterizare completa a tipurilor de comportamente ergodice (1-sided sau 2-sided Bernoulli) pentru perturbatii ale unor functii olomorfe pe spatiul proiectiv $\mathbb{P}^2\mathbb{C}$, restranse la multimile lor bazice fractale. In articolul Hausdorff dimension of the limit set for conformal iterated function systems with overlaps in fibers joint cu Mariusz Urbanski (SUA), publicat in Proceedings American Math. Soc., 2011, am studiat sisteme iterative de functii de contractie, care nu satisfac Open Set Condition. Acest caz este mai dificil decat cele studiate anterior in literatura, si care in general satisfaceau Open Set Condition. Am aratat ca exista legaturi puternice intre dimensiunea Hausdorff a multimii limita si numarul de suprapuneri (overlaps). Intr-o alta problema, de dinamica olomorfa si curenti, lucrez in continuare cu J. E Fornaess. In articolul On some coding and mixing properties for a class of chaotic systems, Monatshefte fuer Mathematik, am studiat proprietati ergodice ale masurilor de echilibru pentru endomorfisme hiperbolice f. Am gasit fenomene noi si total diferite de ceea ce se intampla in cazul difeomorfismelor, si anume: am demonstrat ca daca o masura de echilibru μ_ϕ este 1-sided Bernoulli pe o multime invarianta Λ, atunci functia f se comporta expanding pe Λ din punct de vedere al dimensiunii masurabile. Am aratat totodata si ca sistemul verifica Exponential Decay of Correlations, si este mixing de orice ordin. In articolul Approximations for Gibbs states of arbitrary Holder potentials on hyperbolic basic sets, Discrete and Cont. Dynam. Syst., am demonstrat teoreme noi de aproximare a unei masuri de echilibru cu masuri probabilistice ponderate suportate pe multimi de preimagini.

Minea Gheorghe - • In anul 2011 am finalizat si am in curs de redactare lucrarea *"Entropy conditions for quasilinear first order equations on nonlinear fiber bundles with special emphasis on the equation of 2D flat projective structure. (II)"* pe care o voi supune spre publicare ca preprint electronic in arXiv.org, Cornell University, in saptamanile urmatoare.

• Folosind rezultatele obtinute in aceasta lucrare in cazul dimensiunii 2, am lucrat in 2011 la identificarea conditiilor entropice pentru sistemul hiperbolic al structurii proiective plate in dimensiune arbitrara. Acest sistem reprezinta limita pentru vascozitate nula a modelului multidimensional al lui Burgers pentru turbulenta. Desi fara semnificatie fizica, acest model simplificat este totusi "o cutie a Pandorei" (dupa expresia lui U. Frisch din "Turbulence", Cambridge Univ. Press 2004) de fenomenologie matematica legata de singularitati ale solutiilor, instabilitate, indeterminism si hazard.

• Mentionez faptul ca o comunicare a mea intitulata *"General entropy conditions in terms of*

nonlinear fibre bundles" a fost acceptata si programata la Congresul International de Matematica Industriala si Aplicata (ICIAM 2011) de la Vancouver BC, Canada la care nu am putut totusi participa din motive independente de vointa mea.

Molnar Ionel - In anul 2011 am continuat colaborarea cu prof. Constantin Varsan in domeniul ecuatiilor stocastice ordinare sau cu derivate partiale, avand ca suport metoda sistemului caracteristic. Lucrarea *Two problems for stochastic flows associated with nonlinear parabolic equations*, autori M. Nica, I. Molnar, C. Varsan, a fost prezentata la **International Conference on Mathematical Finance and Economics**, July 6-8, 2011, Istanbul, Turcia (Abstracts Book, Eds. Ahmet Duran and Cskun Cetin, ITU Press, ISBN 978-975-561-398-7)
De asemenea, lucrarea *The characteristic system method for linear higher-order SPDEs of parabolic type*, autori I. Molnar si C. Varsan, publicata in preprint IMAR (9/2011) a fost trimisa spre publicare la Mathematical Reports.

In anul 2011 am reluat studiul si cercetarea in domeniul elastoplasticitatii computationale, in special studiul algoritmilor de integrare in plasticitate si viscoplasticitate avand la baza ideile lui J.C. Simo, urmarind analiza si dezvoltarea lor in cazul unor modele relativ simple, deocamdata, dar si simularea numerica utilizand programe scrise in limbaje precum Matlab si chiar Python. In aceasta directie intentionez o reluare si valorificare a unor rezultate obtinute in anii trecuti.

In anul 2011 am abordat un domeniu relativ nou pentru mine, dar foarte interesant, cel al problemelor de contact intre corpuri solide (elastice), cu/fara frecare, unde pe langa modelarea matematica si formularea problemei, un interes deosebit il prezinta aproximarea solutiei, rezolvarea folosind metode de discretizare si simularea numerica. In aceasta directie am lucrat in colaborare cu Mircea Sofonea (Universite de Perpignan, France), si lucrarea *Analysis and numerical approach of a frictionless contact problem for porous elastic bodies*, se afla in faza de redactare finala.

Moroianu Sergiu - În anul 2011 in colaborare cu Guillarmou am finalizat un preprint despre legatura dintre invariantii Chern-Simons si geometria spatiului Teichmuller.

Am scris de asemenea un preprint cu A. Moroianu despre problema Cauchy pentru metrici Riemanniene Einstein. Aratam existenta unor astfel de metrici pornind de la o hypersurfata initiala impreuna cu un tensor simetric care satisface ecuatiile de constrangere. Rezultatul similar pentru o hypersuprafata Cauchy in cadrul Lorentzian este cunoscuta (Choquet-Bruhat) pentru date initiale netede. Impreuna cu Bernd Ammann de la Regensburg lucram in acest moment la evidentierea unor contraexemple netede (ne-analitice) in cadrul Riemannian.

Nastasescu Constantin - În anul 2011 am continuat cercetările din anii precedenţi în domeniul teoriei categoriilor cu aplicaţii la categoria modulelor peste inele graduate şi la categoria comodulelor peste o coalgebră. De asemenea, am continuat cercetările în domeniul teoriei algebrelor Hopf.

Negut Andrei - În anul 2011, mi-am continuat studiile doctorale la universitatea Harvard.

Nenciu Irina - În anul 2011 am urmat mai multe direcţii de cercetare. In primul rând am continuat, împreuna cu G. Nenciu, studiul autoadjuncţiei operatorului Schrödinger pe varietăţi, ca şi al unor categorii de operatori diferenţiali de ordin 1 (e.g., operatorul Dirac). Scopul nostru este să obţinem condiţii optime care descriu creşterea potenţialului care garantează că operatorul Schrödinger asociat este esenţial autoadjunct. Un alt proiect, împreună cu L.-C. Li, constă

în studiul structurii complet integrabile a ecuaţiei Ablowitz-Ladik cu condiţii la frontiră periodice. Studiul se face din punct de vedere al teoriei Lie-Poisson pentru "loop-groups". Rezultatele includ descoperirea variabilelor canonic conjugate, şi rezolvarea ecuaţiei prin metoda de factorizări matriceale. In fine, împreun ua cu P. Deift continuăm studiul riguros al structurii asimptotice a soluţiilor ecuaţiei Korteweg-deVries, folosind tehnici Riemann-Hilbert.

Nenciu Gheorghe - În anul 2011 am continuat cercetarile si s-au obtinut rezultate privind:

i. Mecanica statistica de neechilibru: transport cuantic in nanostructuri.

ii. Legi de dezintegrare neexponentiale in teoria perturbatiilor a valorilor proprii ale operatorilor Schrödinger.

iii. Essential auto-adjunctia operatorilor Schrödinger si Pauli pe domenii marginite in R^2.

Nichita Felix Florin - In anul 2011:

- am obtinut rezultate noi pe care le-am prezentat la congresul de matematica de la Brasov si la alte conferinte sau le-am inclus in lucrari trimise spre publicare (in legatura cu algebrele Poisson, ecuatii si sisteme Yang-Baxter, algebre Jordan, structuri ingemanate, etc); de exemplu, am aratat ca pentru o algebra Poisson se poate asocia un sistem Yang-Baxter;

- am colaborat cu matematicieni, fizicieni si informaticieni romani: Basarab Nicolescu, Solomon Marcus, Radu Iordanescu, Barbu Berceanu, Calin Popescu, Bogdan Popovici, Barna Iantovics, etc;

- am colaborat cu matematicieni din strainatate: UK, SUA, Polonia, Cehia, etc;

- activitate de documentare in: statistica mecanica, teorie cuantica, grupuri de transformari, etc.

- Am fost referend pentru revistele: *Symmetry, Studies in Computational Intelligence.*

Nicolae Florin - În anul 2011 am continuat studiul functiilor L asociate reprezentarilor grupului Galois al unui corp de numere algebrice cu scopul strategic de a decide daca aceste functii sunt holomorfe.

Nitica Viorel - În anul 2011 am continuat să lucrez in sisteme dinamice şi algebre extremale.

Ornea Liviu - În anul 2011 mi-am continuat cercetarile legate de geometria local conforma Kaehler. Am finalizat doua lucrari incepute in 2010, una privind extinderea invariantului Futaki in acest context conform, cealalta privind eclatarile varietatilor LCK de-a lungul subvarietatilor. Rezultatele sint cuprinse in doua preprinturi (conform listei de mai jos).

Panaite Florin - In lucrarea *Some (Hopf) algebraic properties of circulant matrices*, autori H. Albuquerque si F. Panaite, sunt studiate anumite proprietati algebrice ale matricelor circulante, inspirate de faptul ca algebra matricelor circulante de tip $n \times n$ este izomorfa cu algebra grupala a grupului ciclic cu n elemente. De asemenea, este introdusa o anumita clasa de matrice care generalizeaza atat matricele circulante cat si matricele "skew-circulant", si pentru care valorile si vectorii proprii pot fi citite direct din intrarile matricelor.
In lucrarea *More examples of pseudosymmetric braided categories*, autori F. Panaite si M. D. Staic, sunt investigate anumite clase de categorii braided (respectiv algebre Hopf quasitriangulare) cu scopul de a le identifica pe acelea care sunt pseudosimetrice (respectiv pseudotriangulare). De exemplu, se demonstreaza ca braidingul canonic al categoriei de bimodule Yetter-Drinfeld-Long peste o algebra Hopf H este pseudosimetric daca si numai daca H este

comutativa si cocomutativa. De asemenea, se arata ca toate structurile quasitriangulare (inclusiv cele care nu sunt triangulare) de pe anumite algebre Hopf introduse de catre Radford sunt pseudotriangulare.

Pantilie Radu - În anul 2011 am obţinut, printre altele, următoarele rezultate:

- Introducerea (în colaborare cu S. Marchiafava a) noţiunii de aplicaţie CR cuaternionică si demonstrarea faptului ca oricare asemenea aplicaţie real-analitică, cu diferenţiala nenulă, este restricţia unei aplicaţii cuaternionice între varietăţi cuaternionice. Urmează că, pentru orice subvarietate M, de dimensiune $4k-1$, a unei varietăţi cuaternionice N, astfel încît TM generează un subfibrat cuaternionic de rang (real) $4k$ al lui $TN|_M$, există, local, o subvarietate cuaternionică a lui N, pentru care M este hipersuprafaţă.

- Iniţierea studiului varietăţilor cuaternionice generalizate prin clasificarea spaţiilor vectoriale cuaternionice generalizate şi prin punerea în evidenţă a două clase naturale de asemenea varietăţi (neclasice). Astfel, orice varietate simplectică complexă este, în mod natural, o varietate cuaternionică generalizată (neclasică), acelaşi lucru fiind valabil şi pentru spaţiul heaven al oricărui spaţiu Einstein–Weyl tridimensional. În particular, produsul Z al oricărei varietăţi simplectice complexe M cu sfera este înzestrat cu o structură complexă generalizată naturală, în raport cu care Z este spaţiul twistor al lui M.

Papadima Stefan - În anul 2011, am continuat studiul varietatilor caracteristice si de rezonanta asociate spatiilor, cu aplicatii in topologie, geometrie si teoria grupurilor.

In lucrarea 1.1[1], am analizat cazul acoperirilor Galois, cu accent asupra fibrelor Milnor asociate hipersuprafetelor proiective, din punctul de vedere al actiunii de monodromie. Spre exemplu, pentru aranjamente de hiperplane complexe, am reusit sa legam existenta structurilor de multinet reduse de non-trivialitatea monodromiei, extinzand astfel rezultate obtinute de Falk-Yuzvinsky (Compositio Math. 2007).

In preprinturile 2.3[1,2] am folosit varietatile caracteristice si de rezonanta in studiul grupurilor de automorfisme ale grupurilor libere, respectiv grupurilor de difeotopie ale suprafetelor Riemanniene. De exemplu, in 2.3[1] am gasit un rezultat surprinzator de non-finitudine, raspunzand unei intrebari ridicate de F. Cohen si colaboratorii sai (in J. Algebra 2010).

Pascu Mihai - În anul 2011 am investigat posibilitatile de rafinare a proprietatilor de continuitate ale operatorilor pseudodiferentiali definiti pe spatii de modulatie, utilizind baze Wilson

Pasa Gelu - În anul 2011 am continuat sa studiez efectele substantelor surfactante asupra dislocuirii fluidelor imiscibile in celule Hele-Shaw precum si asupra miscarii bulelor de aer in tuburi capilare, cu aplicatii la recuperarea secundara a petrolului din medii poroase. Am obtinut o demonstratie simpla a faptului ca un strat de surfactant preexistent pe peretii celulei Hele-Shaw poate produce o instabilitate contrara celei studiate de Saffman si Taylor in 1958. Lucrarea este in curs de finalizare. Am obtinut o estimare a grosimii stratului de fluid aderent la peretii unui tub capilar in care se ridica o bula de gaz, precum si o relatie in care apar aceasta grosime, tensiunea superficiala de pe suprafata bulei, viteza de ridicare. Acest model se poate utiliza pentru studiul dislocuirii unui fluid vascos in unele medii poroase particulare. O lucrare cu acest subiect a fost trimisa la revista Math. Report.

Pasol Vicentiu - În anul 2011 am publicat doua articole mentionate mai sus in reviste ISI. Am efectuat vizite de cercetare la Universitatea din Göttingen, unde am continuat colaborarea cu Prof. Preda Mihăilescu in Iwasawa theory. Am continuat colaborarea cu Prof. Adrian Diaconu

de la Univ Durham/ Univ Minnesota.Voi merge la Univ. Minesota si Boston University pentru o vizita de cercetare (16 Nov-2 Dec). Am participat cu expuneri la Congresul international al matematicienilor romani de la Brasov si la ICTAMI, Alba Iulia. Am continuat colaborarea cu Alex Popa despre forme modulare si operatori Hecke.

Pasarescu Ovidiu - În anul 2011 mi-am desfăşurat în continuare activitatea în cadrul colectivului de geometrie algebrică şi am desfăşurat activităţi de cercetare şi documentare, anume:

- Am continuat cercetările legate de vechea şi clasica problemă din domeniul curbelor algebrice, numită Halphen-Castelnuovo, descrisă în preprintul meu de la pct. 7.4 (care reprezintă o forma aproape finală pentru domeniul nelacunar), obţinând progrese care mă apropie de o soluţie completă (domeniul nelacunar şi clarificarea frontierei dintre cele două domenii).Această problemă este general recunoscută de către specialişti ca fiind foarte dificilă, de ea ocupându-se în trecut reprezentanţi proeminenţi ai şcolilor de geometrie algebrică franceză (G. Halphen, L. Gruson, C. Peskine), italiană (G. Castelnuovo, C. Ciliberto, E. Sernesi) şi americană (J. Harris, D. Eisenbud, R. Hartsorne).

- Am continuat activităţile de documentare în domeniul geometriei algebrice biraţionale de dimensiune arbitrară, cu domeniul numit Minimal Model Program. În cadrul acestui program se doreşte demonstrarea unui enunţ de 5 rânduri, care reprezintă extinderea la dimensiune arbitrară a clasificării biraţionale a suprafeţelor algebrice. Deşi matemeticieni proeminenţi (din domeniile geometriei algebrice şi geometriei analitice) lucrează de câteva decenii (numesc doar doi laureaţi Fields: matematicianul americano-japonez H. Hironaka şi matematicianul japonez S. Mori), enunţul dorit este cunoscut ca adevărat doar în dimensiune 3. Totuşi, a rămas de demonstrat o singură parte a programului, numită "terminarea log flipurilor". În această direcţie mi-am îndreptat preocupările, făcând în cadrul seminarului de geometrie algebrică un număr de 10 expuneri (în două serii de câte 5).

Paunescu Liviu - În anul 2011 am obtinut titlul de doctor de la universitatea Roma2 "Tor Vergata". Rezultatele din teza sunt continute in articolul *On sofic actions and equivalence relations* publicat in Journal of Functional Analysis. Activitatea mea de cercetare se desfasoara in principal in domeniul grupurilor sofice si legturile acestora cu teoria ergodica, algebre von Neumann, entropie.

Pilca Mihaela Veronica - În anul 2011 am lucrat la mai multe proiecte de cercetare.

Am continuat impreuna cu Prof. Liviu Ornea studiul metricilor formale, fiind un proiect inca in lucru.

Am finalizat impreuna cu Prof. Andrei Moroianu un proiect despre structurile Clifford omogene de rang superior (a se vedea lista de preprinturi).

Am inceput noi proiecte de cercetare in diferite directii, care incep sa se contureze in ultimul timp. Este vorba mai ales despre studiul varietatilor torice lcK si despre generalizari ale problemei Yamabe.

In anul 2011 am luat parte la urmatoarele stadii de cercetare:

- 1-13 August 2011 stadiu de cercetare la centrul de cercetare matematica din Oberwolfach, Germania.

- 9 -15 Octombrie 2011 stadiu de cercetare la Ecole Polytechnique, Franta.

Polisevschi Dan - În 2011 am continuat colaborarea cu I. Gruais de la Universitatea Rennes1 in domeniul omogenizarii problemelor de transmisie definite in medii periodice cu substructuri fine, activitate concretizata si anul acesta cu o lucrare trimisa spre publicare:

1. I. Gruais, D. Poliševski: *Homogenized fractured porous media along Beavers-Joseph interfaces*, **Journal de Mathématiques Pures et Appliquées**.

În cadrul grupului de Mecanica Continuumului din institutul nostru, am continuat studiul problemelor matematice ridicate de modelarea proceselor in celulele de combustie cu membrana de schimb protonic, studii care au inceput prin lucrarile predate pentru contractele anilor trecuti (CeEx-189 şi CeEx-320).

Pop Ciprian

- **Problema 1.** Fie Z operatorul de shift unidirecţional definit pe un spaţiu Hilbert separabil. Există o legătură strânsă între un anumit tip de lanţuri Markov şi momentele operatorului $Z^* + Z^k Z^*$ (unde $k \in \mathbb{N}, k \geq 3$). Intenţionez să studiez în aprofunzime această legătură.

- **Problema 2.** Fie A_θ torul necomutativ, definit printr-o matrice antisimetrică $\theta \in \mathbb{M}_n$. Fie $S \in SL(n, \mathbb{Z})$ astfel încât ${}^tS\theta S = \theta$. Atunci entropia topologică necomutativă a automorfismului α_θ, indus de S pe C^*-algebra A_θ coincide cu entropia topologică a automorfismului toral indus de S pe $\mathbb{T}^n$.

- **Problema 3.** Fie M un factor von Neumann de tip II_1 cu urma finită normalizată τ. Atunci orice element hermitian $x \in M$ de urmă zero este un comutator în M.

Popa A. Alexandru - In anul 2011 am lucrat la trei teme de cercetare:

1. *Periods of modular forms.* O lucrare a fost acceptata la publicat (vezi mai jos), iar o lucrare in colaborare cu V. Pasol este aproape terminata.

2. *Pair correlation of angles of geodesics on the modular surface.* O lucrare a fost trimis spre publicare si este disponibila ca preprint (vezi mai jos). O alta lucrare este in stadiu de finalizare, impreuna cu F.P. Boca si A. Zaharescu.

3. *Residues of multiple Dirichlet series for affine Lie algebras.* Impreuna cu A. Diaconu, lucrez la generalizarea unor identitati din combinatorica (MacDonald formulas), in contextul seriilor Dirichlet multiple introduse de A. Diaconu si colaboratorii sai.

Popa Nicolae - În anul 2011 am continuat studiul analizei armonice matriceale descriind matricile infinite generate de un singur sir de numere complexe $[\alpha] = \begin{pmatrix} \alpha_1 & \alpha_1 & \alpha_1 & \dots \\ \alpha_1 & \alpha_2 & \alpha_2 & \dots \\ \alpha_1 & \alpha_2 & \alpha_3 & \dots \\ \vdots & \vdots & \vdots & \ddots \end{pmatrix}$ caracterizand printre matricile din aceasta clasa pe cele care sunt multiplicatori Schur pentru diferite spatii Banach de matrici infinite . Am redactat un articol cu titlul: "A class of Schur multipliers on some quasi-Banach spaces of infinite matrices" pe care am trimis-o la publicare la Journal of Function Spaces and Applications, New Delhi (factor de impact ISI pe 2010 - 0,702). Am participat la un workshop in Germania intitulat FSDONA 2011 organizat de Universitatea

Friedrich Schiller Jena in luna septembrie unde am tinut o conferinta cu titlul de mai sus al lucrarii.

Popescu Andrei - In anul 2011, am urmat doua linii principale de cercetare. Mai intai, un sistem coinductiv de tipuri de date pentru demonstratorul de teoreme Isabelle/HOL, bazat pe teoria categoriilor. Apoi, un studiu al proprietatii de noninterferenta in limbajele de programre, folosind relatii de bisimilaritate a la algebra proceselor. Cele doua linii de cercetare vor fi reflectate in publicatiile mele de anul viitor.

Popescu Calin - În anul 2011 am demonstrat o teoremă de factorizare algebrică produsă de sisteme Yang-Baxter. Teorema a fost enunţată fără demonstraţie într-un preprint electronic scris în anul 2010 în colaborare cu Barbu Berceanu şi Florin Nichita. Articolul corespunzător este în curs de finalizare şi urmează să fie trimis spre publicare.

Popescu Clement Radu - În anul 2011 am studiat rezultate din literatură despre prezentări ale mapping class grupului şi subgrupurilor sale (handlebody group, subgrupul Torelli, nucleul morfismului Johnson), folosind acţiuni ale acestora pe diferite complexe simpliciale.

Popescu Dorin - În anul 2011 am continuat cercetarile privind Conjectura Stanley si am elaborat 3 lucrari: una e trecuta la preprinturi electronic anuntate (arXiv), iar doua sunt deja acceptate la Proceed. AMS, respectiv la Analele Univ. Ovidius.

Popescu Ionel - În anul 2011 am avut ca domeniu de cercetare probabilitatile libere pe dreapta reala si in mod particular, inegalitatea Poincare libera. Aceasta a fost legata de inegalitatile de transport si Log-Sobolev deja consacrate. Aceasta linie de cercetare s-a materializat intr-un articol ce urmeaza a fi publicat. O alta linie de cercetare este legata de inegalitatile functionale pe cerc care constituie tema unei lucrari in pregatire. In paralel cu cele de mai sus in lucru este un articol in jurul problemei de convergenta a Ricci flow normalizat pe suprafete. Abordarea este cu totul noua pentru ca tehnologia pe care o folosim este de probabilitati.

Prunaru Bebe - În anul 2011 am abordat trei directii de cercetare dupa cum urmeaza.

1. Puncte fixe pentru operatori Luders. Acesti operatori apar in mecanica cuantica si in alte domenii conexe. Pentru cazul in care un astfel de operator este indus de o contractie linie ale carei componente apartin unei algebre autoadjuncte comutative A am aratat ca toate punctele sale fixe apartin comutantului algebrei A. Aceste rezultate fac obiectul unui articol publicat in J. Physics A.

2. Puncte fixe pentru semigrupuri Markov cuantice. Am aratat ca aceste puncte fixe se pot reprezenta ca si compresii ale punctelor fixe asociate dilatarilor minimale endomorfice ale acestor semigrupuri. Aceste rezultate fac obiectul unui preprint electronic.

3. Corelatii cuantice si reprezentari tensoriale. Am studiat probleme legate de existenta reprezentarilor tensoriale pentru o clasa de comportari bipartite ale caror algebre de observabile intr-o reprezentare relativistica sunt separate de un produs de factori de tip I. Un rezultat in acest sens face obiectul unui preprint electronic.

Prunescu Mihai - În anul 2011 am continuat studiul sirurilor duble recurente peste multimi finite, concentrandu-ma in primul rand asupra acelor siruri duble recurente care se pot genera in mod alternativ printr-o schema de substitutie de dimensiune 2. In primul rand am incheiat cele doua proiecte anuntate in raportul de activitate pe anul 2010: (1) clasificarea geometrica a

sirurilor duble cu recurenta lineara peste inelul de matrici $M_2(\mathbb{F}_2)$ cu conditia initiala $a(i,0) = a(0,i) = I$, matricea unitate si (2) studiul unor siruri duble recurente care au ca conditie initiala siruri simple obtinute prin scheme de substitutie de dimensiune 1 si ca lege de recurenta homomorfisme de grupuri abeliene finite. Clasificarea geometrica a fost un studiu exhaustiv care imparte sirurile duble recurente lineare in 90 de tipuri geometrice si pe cele afine in 92 de tipuri geometrice. Cu alte cuvinte numai doua tipuri geometrice se pot realiza prin functii afine peste inelul de matrici $M_2(\mathbb{F}_2)$ dar nu se pot realiza prin functii lineare. Unul dintre aceste tipuri este o substitutie primitiva, ceea ce confera sirului dublu recurent un grad foarte ridicat de autosimilaritate - este autosimilar relativ la fiecare submultime de culori. Aceste rezultate sunt redactate intr-un articol de 40 de pagini cu foarte multe figuri aparut deja in revista electronica Symmetry. In cadrul celui de-al doilea proiect legile recurente ale triunghiului Pascal modulo 2 ($x+z$ peste $\mathbb{F}_2$) si ale Carpetei lui Sierpinski ($x+y+z$ peste $\mathbb{F}_3$) au fost aplicate unor siruri de substitutie, precum celebrul sir Thue-Morse, dat de substitutiia $1 \to 10$ si $0 \to 01$ cu simbol de start 1. Printre rezultatele concrete prezentate, amintesc sirul duble Thue-Morse-Pascal, care se dovedeste a fi un sir 2-dimensional dat de o substitutie matriciala de tip $4 \times 4 \to 8 \times 8$ cu 15 reguli de substitutie. Un articol prescurtat continand aceste rezultate a fost deja publicat in Comptes Rendus Mathematique, tot in 2011.

In timpul verii am avut sansa unor importante progrese din punct de vedere teoretic. In primul rand am gasit in literatura monografia "Automatic sequences" de J. P. Allouche si J. Shallit aparuta in 2003 la Cambridge University Press. Recomand ca aceasta carte sa fie achizitionata de Biblioteca Institutului nostru, in cazul in care nu a fost achizitionata deja. Cu ajutorul acestei carti am inteles ca sirurile multi-dimensionale care se pot obtine prin reguli de substitutie sunt intotdeauna automatice (Teorema lui Salon) si ca peste un corp finit $\mathbb{F}_q$ de caracteristica p un sir $a(i,j)$ este p-automatic daca si numai daca seria formala $\sum a(i,j)X^iY^j$ este un element algebric peste corpul de functii rationale $\mathbb{F}_q(X,Y)$ (Teorema Christol - Mendes France). Tot din aceasta carte am inteles ca triunghiul lui Pascal modulo 6 nu poate fi generat de un automat finit cu output. Aceasta ultima observatie m-a ajutat sa corectez prin restrangere o conjectura scrisa de mine in articolul "Recurrent two-dimensional sequences generated by homomorphisms of finite abelian p-groups with periodic initial conditions" care era deja acceptat la revista Fractals dar nu aparuse la acea data: conjectura are sens numai pentru p-grupuri abeliene finite, si nu pentru grupuri abeliene finite asa cum scrisesem de exemplu in raportul de activitate pe anul 2010.

Combinand teoremele Christol - Mendes France si Salon cu manipulari algebrice am demonstrat ca sirurile p-afine peste un corp finit $\mathbb{F}_q$ [adica combinatii lineare de puteri ale automorfismului Frobenius in corpul respectiv] sunt intr-adevar p-automatice, deci pot fi obtinute prin substitutii cu factor p. Aceasta inseamna ca am demonstrat conjectura in cazul special al p-grupurilor de forma $\mathbb{F}_p^n$. In acest mod am reusit prima demonstratie a unui fapt general in directia conjecturii, deoarece toate articolele publicate in aceasta directie contin demonstratii computationale ad-hoc pentru cazuri numerice concrete, dar (in afara articolului publicat in anul 2007 la European Journal of Combinatorics) nici o propozitie cu domeniu de actiune infinit. Demonstratia generala din preprintul electronic $\mathbb{F}_p$-*affine recurrent double sequences over* $\mathbb{F}_q$ *are p-automatic* acopera majoritatea exemplelor din articolul aparut in anul 2010 la Fractals, toate exemplele aparute in cele doua articole publicate in 2011, si majoritatea exemplelor din articolul acceptat la Fractals in 2011, care va apare in curand. Totusi, trebuie spus ca teorema nu este constructiva si deci nu spune nimic concret despre regulile de substitutie, in afara de faptul ca ele exista. Privind lucrurile asa, aceste articole nu devin superflue, ci sunt doar intarite de un rezultat mai general dar mai putin descriptiv.

In continuare cercetarea poate avansa in doua directii diferite. In primul rand, trebuie stabilita si demonstrata legatura geometrica intre sirurile duble de tip produs tensorial (carpete cu gauri), date de sisteme de recurenta de tipul $(\mathbb{F}_p, x + my + z, 1)$ si sistemele de recurenta generale $(\mathbb{F}_p, ax + by + cz + d, e)$ (carpete cu petice). Datorita ultimului preprint stim ca toate aceste obiecte sunt de substitutie. Acum insa trebuie inteleasa mai bine natura substitutiei. O alta directie in care cercetarea trebuie sa continue, este de la grupurile $\mathbb{F}_p^n$ la alte grupuri abeliene finite, intr-o prima etapa de exemplu grupurile ciclice $\mathbb{Z}/p^2\mathbb{Z}$.

In final mentionez ca aceasta cercetare se inrudeste atat cu rezultate in domeniul parchetaruilor aperiodice, facute de Penrose, cat si cu rezultate din domeniul quasi-cristalelor. Acest lucru devin cu atat mai interesant, cu cat laureatul Premiului Nobel pentru Chimie in anul 2011 a fost Daniel Shechtman, descoperitorul quasi-cristalelor in natura. Un alt precursor este Stephen Wolfram, creatorul programului Mathematica, cu descrierile si rezultatele di cartea lui: A New Kind of Science. Aceasta ar fi o a doua recomandare pentru Biblioteca Institutului nostru, pe care imi permit sa o fac in acest raport.

Purice Radu - În anul 2011:

- In colaborare cu Viorel Iftimie am utilizat tehnica operatorilor pseudodiferentiali magnetici dezvoltata in anii anteriori (impreuna si cu Marius Măntoiu si Serge Richard) in studiul hamiltonienilor periodici perturbati cu un camp magnetic marginit si regulat in vederea largirii conditiilor tehnice pentru demonstrarea existentei hamiltonienilor efecivi de tip Peierls-Onsager. O lucrare este in curs de elaborare.

- In colaborare cu Horia Cornean am studiat regularitatea frontierelor insulelor spectrale pentru o clasa larga de hamiltonieni continand si hamiltonienii cu camp magnetic marginit si regulat. O lucrare a fost acceptata la publicat intr-un proceedings ce va apare ca volum in seria Operator Theory: Advances and Applications din Birkhäuser - Springer. O alta lucrare este in lucru.

- In colaborare cu Marius Măntoiu am studiat unele aspecte abstracte ale algebrelor Moyal, proprietatile lor topologice si spatiile de modulatie asociate. O lucrare este in curs de finalizare.

Raicu Claudiu - În prima parte a anului 2011 am urmat studii doctorale în cadrul departamentului de matematică al University of California, Berkeley. Începand cu luna Septembrie, am început un stadiu postdoctoral în cadrul departamentului de matematică al Princeton University.

Ramazan Birant - În anul 2011 impreuna cu cercetatori de la Desert Research Institute in Reno am lucrat la metode matematice in studiul durabilitatii surselor de apa in sud estul si nordul peninsulei Sinai.

Radulescu Vicentiu - În anul 2011 am studiat diverse aplicaţii ale ecuaţiilor cu derivate parţiale neliniare, în conexiune cu aplicaţiile lor în chimie, biologie sau genetică. Câteva dintre direcţiile pe care le-am abordat sunt:
– fenomene singulare în fizica matematică;
– probleme neliniare pe fractali;
– ecuaţii Yamabe generalizate şi aplicaţii la probleme Emden–Fowler.

Această problematică se regăseşte atât în articolele publicate, cât şi în monografia apărută în colecţia Springer Monographs in Mathematics (în colaborare cu Marius Ghergu).

Rasdeaconu Rares - În anul 2011 am fost implicat intr-o serie de proiecte de cercetare avînd ca obiect studiul invarianţilor de tip Gromov-Witten asociaţi varietăţilor simplectice înzestrate cu o structură reală compatibilă. Astfel de invarianţi sunt ingredientul esenţial in geometria enumerativa reală, dar sunt şi foarte interesanţi din punctul de vedere al teoriei corzilor in fizica matematică.

1. Intr-un proiect de colaborare cu J. Solomon, Hebrew University, Ierusalim, am definit invarianţi Gromov-Witten deschşi relativi. Este un proiect in curs de redactare şi care are numeroase consecinţe importante. In prezent, lucrăm la obţinerea unei formule care să permite calcularea recursivă a acestor invarianţi. Am descoperit deja aplicaţii ale unei unei astfel de formule care nu sunt analoage celor din teoria Gromov-Witten clasică.

2. Intr-un proiect de colaborare cu J-Y Welschinger, CNRS, Université Lyon, studiem proprietăc tile asimptotice ale invarianţilor Welschinger. Aceşti invarianţi furnizeaza minoranţi pentru numarul de curbe raţionale reale ale varietăţilor simplectice înzestrate cu o structură reală compatibilă în dimensiune patru. Este un proiect intr-un stadiu avansat.

3. Un ultim proiect la care lucrez este studiul dependenţei invarianţilor Gromov-Witten deschişi de structura reală ambientală. Am obţinut rezultate interesante in cazul suprafeţelor cubice.

In alta direcţie de cercetare, în colaborare cu I. Şuvaina, Vanderbilt University şi M. Lejmi, University of Minesota, studiem existenţa de metrici (aproape) Kähler de curbură scalară constantă pe varietăţi simplectice de dimensiune patru. Ca un prim pas, am obţinut deja rezultate locale, construind astfel de metrici complete pe anumite deformari de singularităţi ciclice prin metoda Tian-Yau. Intenţionăm sa extindem rezultatele de lipire Arezzo-Pacard in context simplectic pentru a obţine rezultate globale. Este un proiect intr-un stadiu avansat pe care intenţionat sa îl terminam in următorul an.

Staic Mihai - In lucrarea *Secondary cohomology for commutative algebras* introduc o constructie ce associaza unuei algebre comutative A un modul simplicial $K(A)$. Rezultatele sunt inspirate de o prezentare explicta a grupului simplicial $K(A, 2)$.

In lucrarea *More examples of pseudosymmetric braided categories*, (autori F. Panaite si M. D. Staic), sunt investigate anumite clase de categorii braided (respectiv algebre Hopf quasitriangulare) cu scopul de a le identifica pe acelea care sunt pseudosimetrice (respectiv pseudotriangulare). De exemplu, se demonstreaza ca braidingul canonic al categoriei de bimodule Yetter-Drinfeld-Long peste o algebra Hopf H este pseudosimetric daca si numai daca H este comutativa si cocomutativa. De asemenea, se arata ca toate structurile quasitriangulare (inclusiv cele care nu sunt triangulare) de pe anumite algebre Hopf introduse de catre Radford sunt pseudotriangulare.

Stan Florin - În anul 2011 am incercat sa obtin rezultate referitoare la un anumit grup, intorodus intr-o lucrare anterioara. Mai exact, am incercat sa obtin estimari ale rangului acestui grup abelian. In acest sens, lucrez la articolul 'Effective bounds for the Loxton-Kedlaya rank'.

Stanica Pantelimon - Cercetarea mea se desfasoara in cateva domenii: Teoria Numerelor, Combinatorica, Matematica Discreta, in special functii Booleene cu aplicatii in criptografie. Conduc programul de *Matematica Comunicarii Secrete*.

Stavre Ruxandra - În anul 2011 activitatea de cercetare s-a desfăşurat în următoarele direcţii:

1. Am continuat studiul asimptotic al unor probleme de cuplaj între un fluid vâscos şi o structură elastică. Am urmărit generalizarea rezultatelor publicate pe acestă temă în anii 2006-2010 la cazuri cât mai apropiate de realitate. Sunt finalizate sau în curs de finalizare lucrările:

   a) R. Fares, G. Panasenko, R. Stavre, A viscous fluid flow through a thin channel with mixed (rigid-elastic) boundary. Variational and asymptotic analysis,

   b) G. Panasenko, R. Stavre, The interaction problem between a viscous fluid and an elastic medium. Asymptotic analysis for the periodic case.

2. Pornind de la numeroasele aplicaţii ale curgerilor multifazice prin medii poroase, ne-am propus să analizăm mişcarea a două fluide imiscibile printr-un mediu poros, în condiţiile în care pe frontiera care separă cele două fluide există o discontinuitate de temperatură. În lucrarea

   a) R. Stavre, A distributed control problem for two coupled fluids in a porous medium

   se face un studiu variaţional şi se propune o problemă de control optimal asociată cu problema cuplată a curgerii a două fluide imiscibile printr-un mediu poros, cuplajul realizându-se printr-o condiţie de salt pentru temperatură.

Tiba Dan - În anul 2011 am continuat activitatea de cercetare stiintifica in programele finantate de CNCS (grant 1192/2009) , programul LEA (impreuna cu ua, pekka Neittaanamaki, M.Sofonea, Perpignan), programul Brincusi (impreuna cu Murea Cornel, Mulhouse) unde sunt director de Grant. Temele cercetate sunt legate de probleme de optimizarea formelor, de aplicatii ale metodei variationale prin control optimal, de alicatii la inecuatii variationale, etc. Am efectuat si numeroase vizite in Spania, Finlanda, Germania, Franta unde am dezvoltat colaborari cu matematicieni ca Enrike Zuazua, P.Neittaanmaki, Cornel Murea, Mircea Sofonea, etc. Mai multe lucrari sunt in curs de redactare.

Timofte Aida - În anul 2011 am finalizat un articol care caracterizeaza convergenta uniforma a sirurilor generalizate monotone si simplu convergente de functii definite pe multimi arbitrare. Rezultatele obtinute generalizeaza atat teorema clasica a lui Dini, cat si teorema Dini-Weston asupra convergentei in spatii ordonate local convexe.

Timofte Vlad - In anul 2011 mi-am continuat cercetarile si am obtinut noi rezultate semnificative pe linia dezvoltarii unei noi teorii de diferentiabilitate de tip Frechet pe spatii local convexe, pentru care majoritatea teoremelor importante (inclusiv cele de existenta si diferentiabilitate a functiilor implicite si a celor inverse) functioneaza in ipotezele standard. Aceasta noua teorie care trateaza o veche problema deschisa este acum aproape completa.

Timotin Dan - În anul 2011, în cursul unei vizite de trei luni la Universitatea din Lille am continuat o colaborare mai veche cu Chafiq Benhida. Este in curs de finalizare o lucrare comună privind subspaţii contractiv incluse în spaţii Nevanlinna–Pick. Tot la Lille am iniţiat

o colaborare cu Cătălin Badea şi Laurian Suciu privind dominarea Harnack a contracţiilor pe spaţii Hilbert.

Împreună cu Isabelle Chalendar şi Emmanuel Fricain de la Universitatea din Lyon am definitivat o notă privind conjectura Feichtinger pentru nuclee reproducătoare pe spaţii Nevanlinna–Pick. Lucrarea se poate găsi sub formă de preprint electronic (v. mai jos).

Am continuat colaborarea cu doctorandul meu Waleed Noor, o primă concretizare fiind o lucrare despre măsuri de scufundare pentru spaţii Müntz care se găseşte sub formă de preprint electronic (v. mai jos).

Torok Andrei - În anul 2011 m-am ocupat cu analiza sistemelor dinamice necompacte, cu scopul de a obţine rezultate pentru "coupled lattice networks" in care dinamica locala nu este hiperbolică. De asemenea, în colaborare cu D. Damjanovic şi C. Zhan, studiem rigiditatea acţiunilor parţial hiperbolice de rank cel puţin doi pe nilvarietăţi.

Ursu Vasile - În anul 2011 a fost obtinute urmatoarele rezultate:
1) in laticea tuturor cvasivarietatilor de bucle Moufang nilpotente sunt descrise toate cvasivarietatile neabeliene minimale;
2)laticea tuturor cvasivarietatilor varietatii generata de o bucla Moufang nilpotenta finit-generata L nu poate avea putere numarabila, adica are puterea continuuma sau finita. Aceasta latice este finita daca si numai daca L este grup abelian finit;
3) o bucla Moufang L contine o subbucla nilpotenta neabeliana, iar rangurile grupurilor abeliene din L sunt marginite de un acelasi numar natural, atunci toate cvasiidentitatile adevarate in L nu au baza de cvasiidentitati de la un numar finit de variabile. In particular, bucla Moufang nilpotenta finit generata are baza finita de cvasiidentitati daca si numai daca ea este un grup abelian finit;
4) s-a rezolvat problema bazei finite de cvasiidentitati pentru bucla Moufang nilpotenta finit generata, in particular, si pentru grupul nilpotent finit generat.

Valusescu Ilie - În anul 2011 s-au obţinut rezultate privind geometria proceselor Γ-corelate, în special privind unghiurile Dixmier şi Friedrichs dintre trecutul şi viitorul proceselor, concretizate în lucrarile:

1. Ilie Valusescu: *On the Friedrichs angle between the past and the future of some* Γ*-correlated processes*, **Proceedings of the International Conference on Theory and Applications of Mathematics and Informatics, ICTAMI-2011**, ICTAMI-2011, Alba Iulia, 21-24 iulie 2011, editori: Daniel Breaz, Nicoleta Breaz, Nicoleta Ularu. Acta Universitatis Apulensis, Special Issue (2011), pag. 85-94, ISSN: 1582-5329.

2. Ilie Valusescu: Γ*-correlated processes. Some geometrical considerations*, Preprint IMAR nr. 7/2011, 12 pag.

Vajaitu Marian - În anul 2011 activitatea mea de cercetare s-a desfasurat pe cateva directii principale concretizate in lucrari aparute in 2011, in lucrari acceptate spre publicare sau in lucrari trimise spre publicare:
- **Studiul fractiilor Farey**, concretizat in aparitia lucrarilor:
• *The distribution of rationals in residue classes*, Mathematical Reports, Vol. 13(63), No.4 (2011), C. Cobeli, M. Vâjâitu, A. Zaharescu. (Revista ISI.)
• *A density theorem on even Farey fractions*, Rev. Roumaine Math. Pures Appl., Tome LV, No.6, (2010), pag. 447-482, (C. Cobeli, M. Vâjâitu, A. Zaharescu.)

- **Studiul functiilor analitice rigide**, concretizat in lucrarile:
• *Representation Results for Equivariant Rigid Analytic Functions*, acceptata la Algebr. Represent. Theory, V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu. (Revista ISI.)
• *The behavior of rigid analytic functions around orbits of elements of* $\mathbf{C_p}$, acceptata la Rend. Semin. Mat. Univ. Padova, S. Achimescu, V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu. (Revista ISI.)
• *On the zeros of rigid analytic functions*, V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu, submisa.
• *On p-adic analytic continuation with applications to generating elements*, V. Alexandru, M. Vâjâitu, A. Zaharescu. (In progress.)
• *A theorem of local representation of p-adic analytic elements.* (In progress.)
- **Studiul corpurilor Tate**, concretizat in lucrarea:
• *An algebraic metric equivalence relation over p-adic fields.* (In progress.)

Rezultatele obtinute au fost ca rod al colaborarii cu Alexandru Zaharescu, Cristian Cobeli, Victor Alexandru, Sever Achimescu, cu colegii din cadrul seminarului de Teoria Numerelor cat si cu cercetatori si profesori de la renumite Institute de cercetare si Universitati din tara si strainatate ca: Univeristy of Illinois at Urbana-Champaign, IMAR, Universitatea din Bucuresti etc
• In cadrul Seminarului Stiintific al IMAR, "Nicolae Popescu" Number Theory, am tinut o serie de 5 expuneri reprezentand diseminarea articolelor stiintifice aparute, acceptate sau in curs de publicare.
• Am participat la conferintele IMAR.
• Am fost referent pentru o serie de lucrari trimise spre publicare la revistele: Communications in Algebra, Proc. Romanian Academy, Analele Universitatii din Bucuresti etc

Vilcu Costin - În anul 2011 am continuat colaborarea cu Joseph O'Rourke, asupra existenţei conice a unor curbe inchise pe poliedre convexe, cu consecinţe asupra desfăşurării plane a unor clase de curbe de pe poliedre convexe.

De asemenea, am elaborat şi prezentat, împreuna cu Chie Nara şi Jin-ichi Itoh, prima metodă de aplatizare continua a suprafeţelor poliedrale convexe, bazată pe structura cut locusului.

Vuza Dan Tudor - În anul 2011 am colaborat in cadrul proiectelor de cercetare initiate de Frosch Electronics, Graz, Austria, asupra aspectelor teoretice si practice ale proiectarii, simularii si realizarii cititoarelor RFID pentru protocoalele FDX/HDX n conformitate cu cele mai recente cerinte si standarde impuse unor astfel de dispozitive. Lucrarea *A Current-Driven RFID Reader with Automatic Antenna Tuning* rezultata in urma acestei colaborari a fost distinsa cu Excellent Poster Award in cadrul conferintei SIITME 2011 mentionata mai sus (conform diplomei anexate). De asemenea a rezultat lucrarea *RFID Readers for the HDX Protocol - A Designers Perspective* publicata in volumul colectiv **Current Trends and Challenges in RFID** in urma invitatiei editorilor de a contribui la volum (conform certificatului anexat).

Zaharescu Alexandru - În anul 2011 am desfasurat o activitate de cercetare care s-a concretizat in mai multe lucrari. Am continuat colaborarea cu Marian Vajaitu, Victor Alexandru, Cristian Cobeli, Ciprian Bonciocat, Florin Stan, Bruce Berndt, Mohammad Zaki, Maosheng Xiong, Sun Kim, Mu Tsun Tsai si Kit Ho Mak. Subiectele principale abordate se refera la functiile analitice rigide pe complementara orbitei unui element din completarea inchiderii algebrice a unui corp de numere p-adice, continuarea analitica a unor serii Dirichlet ai caror coeficienti

sunt legati de anumite functii Bessel, numere Weil in extinderea abeliana maximala a corpului numerelor rationale, corelarea directiilor din origine prin puncte laticeale vizibile, reprezentarea numerelor naturale ca sume de numere prime consecutive si distributia punctelor pe o curba algebrica peste un corp finit.

Zamfirescu Tudor - În anul 2011 am studiat generalizări ale conceptelor de convexitate şi moderaţie. De asemenea, am studiat cicluri de lungime maximă în grafuri laticiale.

7.2 Activitate in seminarii

Achimescu Sever - Participare la seminarul de Teoria Numerelor "Nicolae Popescu"; doua prezentari despre forme modulare p-adice.

Albu Toma - Nu am participat in mod regulat la Seminarii IMAR, ci doar ocazional. Am participat in schimb cu expuneri la Seminarul de Algebra organizat de "*Atlantic Algebra Center*", Memorial University of Newfoundland, St. John's, Canada (vezi punctul 8.5.1 din acest raport).

Ambro Florin

1. *Division Flow*, Laboratory of algebraic geometry and its applications, Faculty of Mathematics, Higher School of Economics, Moscow, October 14, 2011
2. *Division Flow*, The 19th National School on Algebra, Computer Algebra and Combinatorics, Univ. Ovidius-IMAR, September 19, 2011
3. *An injectivity theorem*, French-Romanian Workshop on Complex Geometry, Bucharest, July 9, 2011
4. *Divisibility in graded rings,* Algebra Seminar, FMI, Bucharest, May 31, 2011
5. *Series of toric surface singularities,* Workshop for Young Researchers in Mathematics, Ovidius University, May 12, 2011
6. *An approximation problem,* Algebra and Geometry Seminar, Ovidius University, Constanta, April 1, 2011
7. *Nef dimension of canonical divisors,* MAGIC Seminar, Imperial College London, March 21, 2011
8. *MMP and Graded Algebras I - VII,* Algebraic Geometry Seminar, IMAR, Bucharest, March 3,10,31, April 14,21, June 16, 23, 2011
9. *Singularities in Birational Geometry,* Algebraic Geometry Seminar, IMAR, Bucharest, January 20 2011

Anghel Cristian - Am participat la seminarul de Geometrie Algebrica.

Anton Marian - Topological data analysis study group, organizator, Centre College, Fall 2010 - Spring 2011

Aprodu Marian - Prezentări la seminariile de specialitate de la: Institutul Elie Cartan Nancy (3 expuneri) Institutul Fourier Grenoble (1 expunere), Institutul Jussieu Paris (1 expunere, programatdupdepunerea raportului), Institutul Simion Stoilow Bucureşti (3 expuneri)

Arsu Gruia - Am participat la:
- Seminarul de ecuaţii cu deriate parţiale (coordonatori Viorel Iftimie şi Radu Purice).
- Seminarul: Sisteme hiperbolice de legi de conservare (coordonator Liviu Dinu).

Badea Lori - Am participat la doua seminarii,
- Seminarul de Mecanica comun IMAR - Facultatea de Matematica, Universitatea din Bucuresti, si
- Seminarul de Ecuatii cu Derivate Partiale al IMAR.

Baran Andrei - Am participat la Seminarul de functii de mai multe variabile complexe.

Barcau Alexandru Mugurel - Seminarul de Geometrie Algebrică, IMAR.

Baditoiu Gabriel - Am participat la toate seminariile de Geometrie Diferentiala de la IMAR si am facut urmatoarele prezentari in cadrul aceluiasi seminar:

1. Consecinte ale clasificarilor submersiilor Riemann. Teoreme de rigiditate: 9 februarie 2011

2. Introducere in teoria fluxului Ricci (I), (II), (III): 26 octombrie 2011, 2 si respectiv 9 noiembrie 2011.

Barcanescu Serban - In 2011 am continut conducerea Seminarului de Algebra Combinatoriala si Comutativa "Nicolae Radu" (IMAR)
-Fac.Matematica Bucuresti - din partea Facultatii supervizarea a fost facuta de prof. Dorin Popesu).

In cadrul acestui Seminar am tinut conferinta "Combinatorica poliedrelor laticiale si geometria varietatilor torice" (noiembrie2011).

Beltita Daniel - Daniel Beltiţă a participat la Seminarul de Geometrie Diferenţială, la Seminarul de Ecuaţii cu Derivate Parţiale, şi la Seminarul de Metode Operatoriale în Cuantificare, din cadrul Institutului de Matematică "Simion Stoilow" al Academiei Române. La acest din urmă seminar a făcut urmatoarele prezentări:

- *Algebre de operatori integrali închise în raport cu inversarea* (serie de 2 expuneri).

- *Calcul Weyl într-o infinitate de variabile* (serie de 3 expuneri).

Beltita Ingrid - Ingrid Beltiţă a participat la Seminarul de Geometrie Diferenţială, la Seminarul de Ecuaţii cu Derivate Parţiale, şi la Seminarul de Metode Operatoriale în Cuantificare, din cadrul Institutului de Matematică "Simion Stoilow" al Academiei Române.

Berceanu Barbu - Am organizat seminarul de topologie din Abdus Salam School of Mathematical Sciences. Tot aici am tinut un sir de expuneri despre teoria singularitatilor.

Beznea Lucian - Am participat si organizat (impreuna cu profesorii Nicu Boboc si Gheorghe Bucur) seminarul de teoria potentialului al IMAR-Facultatea de Matematica.

Bonciocat Anca Iuliana - participare la Seminarul de Teoria Potenţialului, organizat de Facultatea de Matematică şi Informatică a Universităţii din Bucureşti şi Institutul de Matematică "Simion Stoilow" al Academiei Române. În cadrul acestui seminar, am ţinut două expuneri (pe 8 şi respectiv 15 februarie 2011) în seminarul de Teoria Potenţialului pe tema "Functional inequalities". Am prezentat inegalităţile Brunn-Minkowski, izoperimetrice, de transport şi log-Sobolev, ca şi conexiuni cu inegalităţile de concentrare a măsurii.

Bonciocat Nicolae Ciprian - participare la seminarul de Algebra Locala "Nicolae Radu" organizat de Institutul de Matematica "Simion Stoilow" al Academiei Romane in colaborare cu Facultatea de Matematica si Informatica a Universitatii din Bucuresti.

Brinzanescu Vasile - Am participat la seminariile de geometrie algebrica si de geometrie diferentiala. Am organizat seminarul de geometrie algebrica.

Burciu Sebastian - S-a participat la seminarul de topologie algebrica IMAR si la un miniseminar de algebre Hopf din cadru Universitatii Bucuresti unde s-a tinut expunerea "Asupra unei Teoreme a lui Ito" in Februarie 2011.

Buruiana Nicolae - Am participat la seminarul de Geometrie Algebrica al Institutului.

Calinescu Corina - Sunt co-organizator al seminarului "Geometry, Symmetry and Physics" in departamentul de matematica la Universitatea Yale.
Prezentari la seminarii in 2011:
1. CUNY Representation Theory Seminar, CUNY-Graduate Center, New York.
2. Lie Groups/Quantum Mathematics Seminar, Rutgers University, New Brunswick.

Capatina Anca - Am participat la următoarele seminarii :

- *Metode variaţionale în mecanică* - seminar al grupului de Mecanica Mediilor Continuumului din IMAR (coordonator H. Ene)
- *Metode asimptotice şi aplicaţii* - seminar de lucru (coordonator H. Ene)
- *Mecanica mediilor deformabile* - seminar organizat de catedra de mecanică din Facultatea de Matematică, Universitatea Bucureşti şi grupul de Mecanica Mediilor Continuumului din IMAR (coordonatori V. şi S. Ţigoiu)

Cheptea Dorin - Seminarul de topologie, IMAR

Chiriacescu Gabriel - Participare in Seminarul de Algebra Comutativa si Combinatorica "N. Radu".

Cimpoeas Mircea - Am participat la seminarul de algebră "Nicolae Radu", care are loc săuptămânal pe perioada anului universitar, marţi între orele 12-14, unde am susţinut o prezentare intitulată "Bounds for Stanley depth of certain classes of monomial ideals and their residue class rings".

Cipu Mihai - Am participat la Seminarul de Algebră Comutativă „Nicolae Radu", în cadrul căruia am susţinut expunerea „Using symmetry to project polytopes".

Cojocaru Alina-Carmen

- Participare in seminarii: Seminar de Teoria Numerelor, Universitatea Illinois - Chicago, SUA
- Prezentari facute:
  - Octombrie 2011, Seminar de Teoria Numerelor, Universitatea Illinois - Chicago, SUA
  - Iulie 2011, Colocviu, Institutul de Matematica ,,Simion Stoilov", Academia Romana, Bucuresti, Romania
- Seminarii organizate: Seminarul de Teoria Numerelor, Universitatea Illinois - Chicago, SUA

Constantinescu Adrian - Participare la seminariile:
Geometrie Algebrica (de la Institutul de Matematica "Simion Stoilow" al Academiei Romane),
Algebra Comutativa (de la Facultatea de Matematica si Informatica a Universitatii din Bucuresti, in colaborare cu Institutul de Matematica "Simion Stoilow" al Academiei Romane),
Teoria Subvarietatilor (de la Facultatea de Matematica si Informatica a Universitatii din Bucuresti. Particpare partiala.).

Constantinescu Alexandru - *Are toric ideals of graphs glicci?*,
Seminarul de algebra si topologie al Universităţii din Basel, Octombrie 2011.

Daia Liviu - Am participat la seminariile şi conferinţele organizate de grupul de Analiză Complexă şi Teoria Potenţialului, din care fac parte.

Dan Nicusor - Am participat la cateva sedinte ale Seminarului de Geometrie Algebrica al IMAR.

David Liana - Am participat la seminarul de geometrie diferentiala de la IMAR, unde am tinut expuneri pe tema structurilor complexe generalizate invariante pe grupuri Lie, si, de asemenea, pe tema 2-formelor conforme-Killing (studiu local) definite pe varietati cuaternionice-Kahler.

Deliu Dragos

1. 2011-Homological Projective Duality for Gr(3,6)
   University of Vienna, Austria
2. 2011-Landau-Ginzburg Calabi-Yau correspondence in Orlov's work
   University of Vienna, Austria
3. 2011-Cycles on surfaces
   University of Vienna, Austria

Diaconescu Razvan - Activitatea de tip seminar am desfăşurat-o în cadrul cursurilor, seminariilor şi practicilor de cercetare ţinute în cadrul programului masteral *Logică şi Specificaţii Formale* al SNSB, program puternic orientat către cercetare şi organizat de mine.

Diaconu Calin Adrian

1. *Trace Formulas, Character Sums, and Multiple Dirichlet Series,* Seminarul de Teoria Numerelor, Februarie 2011, Institutul de Matematică Max Planck.

2. *Trace Formulas, Character Sums, and Multiple Dirichlet Series,* Joint Number Theory meeting Aachen-Koeln-Lille-Siegen, March 2011, Universitatea din Köln.

3. *Trace Formulas, Character Sums, and Multiple Dirichlet Series,* Oberseminar de Teoria Analitică a Numerelor, April 2011, Universitatea din Göttingen.

4. *Trace Formulas, Character Sums, and Multiple Dirichlet Series,* The Analytic Theory of Automorphic Forms Workshop, 28 August - 3 Septembrie 2011, Oberwolfach.

Notă: Fiecare prezentare a fost făcută în 60 de minute.

Dinu Florin Liviu - Participare la Seminarul de Ecuaţii cu Derivate Parţiale 2011.

Dragan Vasile - Particip la Seminarul de Ecuatii Differentiale si Control Optimal. Am prezentat expuneri legate de cercetarile personale privind problema filtrarii unor semnale generate de sisteme stochastice in timp discret. Ma ocup de organizarea acestuia in sensul anuntarii temei si lectorilor, convocarea colegilor.

Dumitrescu Olivia

- *Cones of Divisors of Blow-ups of Projective Space*
  Graduate Algebraic Geometry Seminar - University of California, Davis, October 2011

- *Approximations of Nagata's conjecture*
  Algebraic Geometry Seminar - Mittag-Leffler Institute, Stockholm, May 2011 Algebra Seminar - Colorado State University, Fort Collins, April 2011

- *Approximations of Nagata's conjecture*
  Algebra Seminar - Colorado State University, Fort Collins, April 2011

- *Atiyah-Bott Localization: Introduction and Examples*
  Gromov Witten Seminar - University of California, Davis, March 4th, 11th 2011

- *Lectures on Interpolation Problems*
  Algebra Seminar - University of California, Davis, February 2011

- *Lectures on Fano Varieties*
  Algebra Seminar - University of California, Davis, October 2010

- *Degenerations Techniques and Interpolation Problems*,
  Ottawa-Carleton Algebra Seminar Ottawa-Carleton, Ottawa, December 2010

Enescu Florian - Am organizat seminarul de algebra comutativa la Georgia State University unde am si tinut cateva expuneri. Am tinut urmatoarele expuneri: (October 2011), Hilbert-Kunz multiplicities, Algebra Seminar, Georgia Tech. (May 2011), Local cohomology in positive characteristic, Institute of Mathematics of the Romanian Academy, Romania. (May 2011), Hilbert-Kunz multiplicities, University of Bucharest, Nicolae Radu Algebra Seminar, Romania.

(May 2011), The Hilbert-Kunz multiplicity, Algebraic Geometry Seminar, Mainz University, Germany

Epure Mihai - Sunt membru activ al seminarului de algebra comutativa si combinatorica "Nicolae Radu" organizat de I.M.A.R. avand mai multe expuneri pe 2 teme : monoizi afini (normali) si baze Grobner pentru module.

Faciu Cristian - Participare la seminarul săptămânal de Mecanica mediilor deformabile organizat impreuna cu Catedra de Mecanică de la Facultatea de Matematică la Universitatea din Bucureşti. Serie de prezentări făcute în lunile martie si aprilie 2011 cu titlul *Structura stratului de şoc generată de vâscozitatea maxwelliană şi termoconducţie in cazul tranziţiilor de fază solid-solid.*

Gaba Radu - In 2011 am participat in prima parte a anului la seminariile QVNTS (Québec-Vermont number theory seminars), Montréal, Canada iar in cea de-a doua la seminariile de Teoria Numerelor si de Algebra comutativa si combinatorica din cadrul IMAR; sustin in data de 23 Noiembrie 2011 prezentarea cu titlul "Asupra unor clase speciale de curbe eliptice complexe" in cadrul seminarului "Nicolae Popescu" de Teoria Numerelor. Tot astfel, am participat la Scoala Nationala de Algebra (a 19-a editie), 18-24 Septembrie si la Workshop-ul romano-francez de Geometrie Complexa, 7-9 iulie.

Ghergu Marius - Am ţinut expuneri in cadrul seminariilor din University College Dublin, Trinity College Dublin (Irlanda), Université de Picardie (Franţa), Swansea University (UK).

Gologan Radu - Am participat la seminarul de teoria operatorilor.

Ichim Bogdan - Am participat la seminarul grupului de algebra unde am tinut in total 5 prezentari. Am participat la seminarul grupului de geometrie algebrica.

Ionescu-Kruse Delia - Participare la seminarul de Mecanica Mediilor Deformabile, organizat impreuna cu catedra de Mecanica a Facultatii de Matematica.

Ionescu Paltin - Am participat la Seminarul de Geometrie Algebrica organizat de IMAR–FMI

Iordanescu Radu - In fiecare MIERCURI,la Seminarul de geometrie diferentiala si (uneori) VINERI, la Seminarul de topologie.

Leustean Laurentiu - Am organizat la IMAR seminarul "Effective methods in (nonlinear) ergodic theory" pentru studenţii SNSB, unde au ţinut prezentări Laurenţiu Leuştean, Ulrich Kohlenbach (Universitatea Tehnică din Darmstadt), David Ariza (Universitatea din Sevilla) şi studenţii SNSB Diana Putan, Andrei Stoica şi Emanuel Vlad.

Lozovanu Victor

1. **Prezentare:** *"A multigraded vanishing theorem"*, CMS Winter Meeting, Toronto, Canada (December 2011).

2. **Prezentare:** *"Vanishing theorems"*, Seminarul de Geometrie Algebrica si Teoria Numerelor, Johns Hopkins University, USA (November 2011).

3. **Prezentare:** *"Projective normality of adjoint line bundles"*, Seminarul de Geometrie Algebrica, Queen's University, Canada (September 2011).

4. **Prezentare:** *"Volumes of NObodies"*, Mini-Workshop:" New Developments in Newton-Okounkov Bodies", Oberwolfach, Germany (August 2011).

5. **Prezentare:** *"Regularity of smooth curves in biprojective spaces"*, Al V-lea Congres Iberoamerican in Geometrie, Chile (December 2010).

6. **Prezentare:** *"Asymptotic invariants in algebraic geometry"*, Scoala in Geometrie Complexa, Chile (December 2010).

7. **Co-Organizator:** "Curve Seminar", Queen's University, Semestrul Iarna-Primavara 2011 (impreuna cu prof. Greg G. Smith si prof. Mike Roth).

Maican Mario - Participare in seminarul de Geometrie Algebrica al IMAR.

Matei Daniel - Seminarul de topologie, IMAR: doua serii de expuneri cu titlurile *Grupuri de clase de homeomorfisme de suprafete si invarianti de 3-varietati* si *Acoperiri finite de 3-varietati*.

Maxim Laurentiu

1. In anul 2011 am (co-)organizat urmatoarele seminarii:

   (a) Mathematics Colloquium, University of Wisconsin-Madison

   (b) Geometry and Topology Seminar, University of Wisconsin-Madison

2. In anul 2011 am facut prezentari in seminarii si conferinţe dupa cum urmeaza:

   (a) *Iberian Meeting on Algebraic Analysis and Geometry*, Lisbon, Portugal, 09/2011.

   (b) *Latin American School of Algebraic Geometry and Applications*, Cordoba, Argentina, 08/2011.

   (c) *Seminar on Singularity Theory and Related Topics*, Beijing, China, 07/2011.

   (d) *The Seventh Congress of Romanian Mathematicians*, Brasov, Romania, 06-07/2011.

   (e) *Geometry Summer School (40 hours of lecturing)*, University of Science and Technology of China, Hefei, China, 05-07/2011.

   (f) *East China Normal University Topology Seminar*, Shanghai, China, 06/2011.

   (g) *Michigan State University Algebra Seminar*, East Lansing, Michigan, USA, 03/2011.

   (h) *Iowa State University Colloquium*, Ames, Iowa, USA, 02/2011.

   (i) *University of Wisconsin-Madison Geometry & Topology Seminar*, Madison, Wisconsin, USA, 02/2011.

   (j) *Northeastern University Colloquium*, Boston, USA, 01/2011.

Macinic Anca - In cursul anului 2011 am participat la seminarul organizat in cadrul colectivului de Topologie al IMAR.

Am organizat si sustinut, impreuna cu lector dr.Denis Ibadula un seminar stiintific studentesc la Universitatea Ovidius Constanta cu tematica "Aranjamente de hiperplane".

Mihailescu Eugen - In anul 2011 am participat activ la seminarul de analiza complexa la IMAR.

Minea Gheorghe - In cadrul seminarului "Sisteme hiperbolice de legi de conservare"am continuat in 2011 ciclul de expuneri "Investigatii geometrice asupra conditiilor entropice" in care prezint rezultatele obtinute de mine; am tinut in total 24 de expuneri in anul scolar 2010-2011.

Molnar Ionel - Participare la seminarul stiintific *Mecanica mediilor deformabile*.

Moroianu Sergiu

1. Expunere la seminarul de geometrie de la Univ. Regensburg, Ianuarie 2011;
2. Expunere la seminarul de geometrie de la Univ. Nantes, Martie 2011.

Negut Andrei - Am participat in doua seminarii de teoria geometrica a reprezentarilor (Harvard, primavara 2011 si toamna 2011).

Nenciu Irina - Prezentări în următoarele seminarii şi conferinţe:

1. Seminarul de fizic ua teoretică, Institutul Naţional de Fizică şi Inginerie Nucleară, Bucureşti, Decembrie 2010;
2. 2011 AMS Spring Central Section Meeting, Sesiunea Specială pentru Teorie Spectrală, University of Iowa, Iowa City, IA, Martie 2011;
3. 7th Congress of Romanian Mathematicians, Brasov, Romania, Iunie 2011;
4. Conferinţa ESF "Completely Integrable Systems and Applications", Erwin Schrdinger Institute, Viena, Austria, Iulie 2011.

Începând din August 2011, sunt unul dintre organizatorii seminarului saptămânal de cercetare "Mathematics and its applications", în Departamentul de Matematică, Univeristy of Illinois at Chicago.

Nenciu Gheorghe - Participare la seminarul de lucru "Analiza Spectrala si Operatori Pseudodiferentiali" al grupului de Ecuatii Diferentiale si Fizica Matematica din IMAR. Expuneri: "Operatori Schroedinger cu camp magnetic constant si hamiltonieni effectivi Peierls-Onsager", "Transformari F-W si bloc-diagonalizarea operatorilor Dirac".

Nichita Felix Florin - Am participat la toate seminariile stiintifice ale colectivului de Topologie si la conferintele organizate de IMAR si FMI.

Ornea Liviu - Am participat la seminarul de geometrie diferentiala al IMAR (miercuri, 10-12, sala 309).

Panaite Florin - Am participat la Seminarul saptamanal de Topologie al colectivului, in cadrul caruia am tinut o expunere cu titlul "Pseudosymmetric braidings and a quotient of the braid group"

Pantilie Radu - Particip la organizarea Seminarului de Geometrie Diferenţială al I.M.A.R., în cadrul căruia am făcut următoarele expuneri:

- Clasificarea subspaţiilor vectoriale reale ale unui spaţiu vectorial cuaternionic;
- Aplicaţii CR cuaternionice.

Deasemenea, în cadrul seminarului de specialitate al departamentului de matematică al Universităţii din Roma "La Sapienza", am făcut următoarele expuneri:

- On holomorphic maps and Generalized Complex Geometry;
- Introduction to Quaternionic Geometry (expunere de două ore);
- On CR quaternionic maps;
- Generalized quaternionic manifolds.

Papadima Stefan - Am organizat Seminarul de Topologie al IMAR.

Pascu Mihai - seminarul de Analiza spectrala si operatori pseudodiferentiali.

Pasa Gelu - Am participat la seminarul "Metode Functionale in Mecanica Fluidelor", condus de Prof. Horia Ene, tinut la IMAR, precum si la "Seminarul doctoral" sustimnut de doctoranzi de la Universitatea din Pitesti, condus de prof. Horia Ene. Am participat si la Semirnatul de Mecanica de la Facultatea de Matematica Bucuresti, condus de prof. Sanda Tigoiu si conf. Victor Tigoiu.

Pasol Vicentiu - Seminarul de teoria Numerelor "Nicolae Popescu".

Pasarescu Ovidiu - Am participat la seminarul de geometrie algebrică efectuând un număr de 10 expuneri, în două serii:

- Aplicaţii ale analizei nonstandard şi teoriei modelelor în geometria algebrică (5 expuneri).

  Prin aceste expuneri am adus î n atenţia membrilor seminarului unele metode din domenii nu foarte bine reprezentate în România (la unele proiecte am observat că nu se găsesc uşor evaluatori competenţi din domeniile teoriei modelelor şi analizei nonstandard). Aceste metode sunt folosibile şi în modelarea matematică (economii matematice, fizică cuantică, informatică cuantică, etc.), cum am punctat în seminar.

- Asupra terminării flipurilor (5 expuneri).

  Aceste expuneri (ca şi cele anterioare) au fost legate de pct. al doilea al secţiunii mele 7.1. Am prezentat seminarului diverse metode de abordare a problemei considerate, folosind diverse tehnici: metodele lui V. Shokurov (legate de ascending chain condition pentru minimal log discrepancy=mld), cele ale lui M. Mustaţă, polinosmele Bernstein-Sato (din teoria D-modulelor) şi log canonical thresholds=lct, legături dintre arc spaces, jet schemes, motivic integration şi mld şi lct,posibilul impact al acestora asupra terminării log flipurilor, etc.

Paunescu Liviu - *Sofic actions and equivalence relations*; Sofic Groups seminar Lausanne-Wien-Neuchtel 30 March 2011. http://egg.epfl.ch/lawine/

Pilca Mihaela Veronica - Participare in seminarii si prezentari facute:

1. 5.01.2011, On Formal Riemannian Metrics, Differential Geometry Seminar, IMAR, Bucharest, Romania.

2. 18.05.2011, Dirac Operators in Kähler Geometry, Spring School Index Theory, Graduiertenkolleg Regensburg, Hesselberg, Germania.

Polisevschi Dan - Particip la doua seminarii saptamanale:

1. "Mecanica mediilor deformabile", organizat de Catedra de Mecanica si Ecuatii, Universitatea Bucuresti si Grupul de Mecanica Continuumului, Institutul de Matematica "Simion Stoilow", Bucuresti

2. "Metode variationale in mecanica", organizat de Grupul de Mecanica Continuumului,, Institutul de Matematica "Simion Stoilow", Bucuresti

Pop Ciprian - Seminarul de Algebre de operatori, UNR (University of Nevada, Reno)

Popescu Clement Radu - În anul 2011 am participat regulat la seminarul de topologie al Institutului de Matematică. Am ţinut expuneri despre extinderea morfismului Johnson facută de Morita (expuneri făcute după o lucrare a lui Perron); şi despre unele rezultate partiale ale lui Putman în rezolvarea unei conjecturii lui Ivanov (primul număr Betti al unui subgrup de index finit al mapping class grupului este 0, egal cu cel al grupului însuşi).

Popescu Dorin - Am participat la seminarul de Algebra Locala "Nicolae Radu" cu mai multe prezentari, seminar organizat de mine cu S. Barcanescu si C. Ionescu.

Popescu Ionel - participare in seminarii;
Inegalitati Functionale (seminarul de teoria Potentialului) minicurs de 8 sedinte,
Libertate si matrici aleatoare (algebre de operatori) 2 sedinte

Prunescu Mihai - Am participat la Oberseminar der Mathematischen Logik, Universitatea Freiburg, Germania, condus de Prof. Dr. Martin Ziegler si Prof. Dr. Heike Mildenberger.

Purice Radu - Am participat la seminarul de Analiza Spectrala si Operatori Pseudodiferentiali, in cadrul caruia, in perioada Aprilie-Mai 2011 am sustinut 2 seminarii privind articolul C. Gérard, A. Martinez, J. Sjöstrand de Hamiltonieni periodici cu camp magnetic (Comm. Math. Phys. 142 (1991)).

Raicu Claudiu - Am fost invitat să susţin prelegeri în seminarii si workshopuri organizate în diverse universităţi din Statele Unite şi Germania:

1. Princeton Algebraic Geometry Seminar: *Secant Varieties of Segre–Veronese Varieites.*

2. Princeton Algebraic Geometry Preprints Seminar: *F–Signature.*

3. Macaulay2 Workshop, Institute for Mathematics and its Applications, Minneapolis: *The SchurRings package.*

4. Géométrie Algébrique en Liberté, Berlin: *Affine Toric Equivalences are Effective.*

5. UC Berkeley Algebraic Geometry and Commutative Algebra Seminar: *Secant Varieties of Toric Varieties.*

6. MIT Combinatorics Seminar: *The GSS Conjecture.*

7. Joint Harvard/MIT Algebraic Geometry Seminar: *Affine Toric Equivalence Relations are Effective.*

8. Northeastern Geometry-Algebra-Singularities-Combinatorics Seminar: 3×3 *Minors of Catalecticants.*

9. University of Michigan Algebraic Geometry Seminar: *The Garcia–Stillman–Sturmfels Conjecture.*

10. UC Davis Geometry and Topology Seminar: 3×3 *Minors of Catalecticants.*

11. Texas A&M Geometry Seminar: *The GSS Conjecture.*

12. Queen's Curves Seminar: 3×3 *Minors of Catalecticants.*

13. Queen's Algebraic Geometry Seminar: *Affine Toric Equivalence Relations are Effective.*

Radulescu Vicentiu - Am organizat seminarul de analiză neliniară pentru doctoranzii de la Universitatea din Craiova care lucrează sub îndrumarea mea. Am prezentat următoarele expuneri pe baza rezultatelor proprii:

(i) *Variational principles and applications to multiple solutions of PDEs*, International Conference on Nonlinear Operators, Differential Equations and Applications (ICNODEA 2011), Cluj, July 5-8, 2011

(ii) *Qualitative analysis of some problems in the theory of non-Newtonian fluids*, Partial Differential Equations in Mathematical Physics and their Numerical Approximation, Levico Terme, Trento, Italy, September 4-9, 2011

(iii) *Proprietăţi calitative ale soluţiilor unor probleme de valori proprii neliniare*, Seminarul Catedrei de Matematică, Universitatea Ovidius, Constanţa, 21 Octombrie 2011

(iv) *Bifurcation phenomena associated to degenerate or singular elliptic equations*, Oxford PDE Seminar, University of Oxford, November 14, 2011

Rasdeaconu Rares - În anul 2011, pe lînga participarea la seminariile curente ţinute la Vanderbilt University, Nashville, USA, am susţinut urmatoarea prezentare:

1. *Tian-Yau metrics and cyclic quotient singularities,* Noiembrie 2011, Vanderbilt University, Nashville, SUA.

Staic Mihai

1. Prezentare la North Dakota State University, 20 Ianuarie 2011.

2. Prezentare la Bowling Green State University, 6 Aprilie 2011.

Stan Florin - În anul 2011 am incercat sa obtin rezultate referitoare la un anumit grup, intorodus intr-o lucrare anterioara. Mai exact, am incercat sa obtin estimari ale rangului acestui grup abelian. In acest sens, lucrez la articolul 'Effective bounds for the Loxton-Kedlaya rank'.

Stanica Pantelimon

1. *Generalized Bent Functions and nega-Hadamard Transform*, Integers Conference, Univ. West Georgia, October 2011.

2. *Catalan Numbers and Euler Functions*, West Coast Number Theory Conference, December 2011, Monterey, CA.

Stavre Ruxandra - Am participat la următoarele seminarii ştiinţifice:

1. Metode variaţionale în mecanica fluidelor, IMAR, conducător prof. dr. Horia Ene,
2. Mecanică şi aplicaţii, Facultatea de Matematică, conducator prof. dr. Sanda Cleja-Tigoiu,
3. Seminarul IMAR.

La primul seminar am susţinut expuneri legate de elaborarea lucrării 2 a) de mai sus.

Tiba Dan - Seminarul Differential Equatiosn, IMAR : doua expuneri. Am organizat si Seminarul Grantului 1192 CNCS

Timofte Aida - Seminarul de analiza (saptamanal) de la University of Mississippi, Department of Mathematics.

Timofte Vlad - Seminarul de Analiza de la University of Mississippi, Department of Mathematics.

Timotin Dan - Am participat la seminarul de teoria operatorilor desfăşurat la institut, precum şi la seminarul de teoria operatorilor de la universitatea din Lille (martie–mai).

Torok Andrei - Particip in seminariile de Analiză (University of Houston) şi Sisteme Dinamice (University of Houston, Rice U.). Sunt unul din organizatorii seminarului de Sisteme Dinamice de la University of Houston.

Valusescu Ilie - Participare la seminariile de Teoria Operatorilor, Teoria Potenţialului şi alte seminarii, în funcţie de tematica discutată.

Vajaitu Marian - In cadrul Seminarului Stiintific al IMAR, "Nicolae Popescu" Number Theory, am tinut o serie de 5 expuneri reprezentand diseminarea articolelor stiintifice aparute, acceptate sau in curs de publicare, dupa cum urmeaza:

• Local representations of p-adic analytic elements I. Speaker: Marian Vajaitu (IMAR), Wednesday, February 9, 2011, 16:00, FMI, Hall 204.
• Local representations of p-adic analytic elements II. Speaker: Marian Vajaitu (IMAR), Wednesday, February 16, 2011, 16:00, FMI, Hall 204.
• Essential singularities of rigid analytic functions. Speaker: Marian Vajaitu (IMAR), Wednesday, April 6, 2011, 16:00, FMI, Hall 204.
• Some remarks on the p-adic log gamma function. Speaker: Marian Vajaitu (IMAR), Wednesday, May 4, 2011, 16:00, FMI, Hall 204.
• On p-adic analytic continuation with applications to generating elements. Speaker: Marian Vajaitu (IMAR), Wednesday, October 26, 2011, 16:00, FMI, Hall 216.

Vilcu Costin - În anul 2011 am participat la seminarul de geometrie diferenţială din cadrul IMAR, unde am avut două expuneri, despre *Quasigeodezice si puncte cele mai indepartate pe suprafete convexe* şi despre *Existenta conica a unor curbe inchise pe poliedre convexe.*

În plus, am avut o prezentare la *Colocviul de geometrie un an de la dispariţia profesorului Stere Ianuş* (Facultatea de Matematică şi Informatică Universităţii Bucureşti, 6 Mai 2011), intitulată *O teoremă de aplatizare.*

7.3 Lucrari acceptate la publicat

1. S. Achimescu, V. Alexandru, N. Popescu, M. Vajaitu, A. Zaharescu *The Behavior of Rigid Analytic Functions around Orbits of Elements of* $\mathbf{C}_p$, acceptata la Rendiconti del Seminario Matematico della Universit di Padova

2. T. Albu: *The Osofsky-Smith Theorem for modular lattices, and applications (I)*, acceptata la **Comm. Algebra, 40** (2012), pag, 1 – 19.

3. Marian Aprodu, Gavril Farkas: *Green's Conjecture for general covers*, acceptata la Contemporary Math. AMS

4. L. Badea and R. Krause, *One- and two-level Schwarz methods for variational inequalities of the second kind and their application to frictional contact*, **Numer. Math.**, DOI: 10.1007/s00211-011-0423-y

5. Barcanescu Serban - Am propus spre publicare (la Questiones Mathematicae-20/03/2011) lucrarea : "On the non-generic Tzitzeica-Johnson Configuration" (colab.cu W.Boskoff, A.Bobe).

6. Michael Anshelevich, Serban T. Belinschi, Maxime Février, Alexandru Nica: *Convolution powers in the operator-valued framework*, acceptata la Transactions of the American Mathematical Society, pag. 33. (disponibil şi la arXiv:1107.2894).

7. I. Beltiţă, D. Beltiţă: *Algebras of symbols associated with the Weyl calculus for Lie group representations*, acceptată la Monatshefte für Mathematik (http://dx.doi.org/10.1007/s00605-011-0329-x).

8. D. Beltiţă, K.-H. Neeb: *Schur-Weyl Theory for C^*-algebras*, acceptată la Mathematische Nachrichten.

9. Barbu Berceanu, Saima Parveen: *Fundamental group of Desargues configuration spaces*, acceptata la Studia Sci. Math. Hungarica, pag. n – (n+10)

10. S. Burciu: *Kernels of representations and coideal subalgebras of Hopf algebras*, **Glasgow Mathematical Journal to appear** (2011), pag. ... – ...

11. S. Burciu: *Quantum doubles of rank two pointed Hopf algebras*, **Commun. Algebra, to appear** (2011), pag. –

12. M. Cipu, M. I. Qureshi: *On the behaviour of Stanley depth under variable adjunction*, acceptată la **Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie**

13. M. Cipu, I. Diouf, M. Mignotte: *Testing degenerate polynomials*, acceptată la **Applicable Algebra in Engineering, Communication and Computing**

14. N. C. Bonciocat, Y. Bugeaud, M. Cipu, M. Mignotte: *Some Pólya-type irreducibility criteria for multivariate polynomials*, acceptată la **Communications in Algebra**

15. : I. Chiose, M. Toma *On compact complex surfaces of Kähler rank one*, acceptata la Amer J Math

16. M. Cipu: *Cyclic quadrilaterals associated to squares*, acceptată la **Forum Geometricorum**

17. I. Coandă: *A simple proof of Tyurin's babylonian tower theorem*, acceptata la Comm. Algebra

18. M. Coltoiu,C. Joita: *The disk property of coverings of 1-convex surfaces*, acceptata la Proc. AMS

19. M. Coltoiu, C. Joita, M. Tibar: *q-convexity properties of the coverings of a link singularity*, acceptata la Publ. Res. Inst. Math. Sci.

20. L. David: *A prolongation of the conformal-Killing operator on quaternionic-Kahler manifolds*, **Annali di Matematica Pura ed Applicata, (6) vol. 61** (2011), DOI10.1007/s10231-011-0198-x.

21. D. V. Alekseevsky, L. David: *A note about invariant SKT-structures and generalized Kahler structures on flag manifolds*, acceptata in **Proceedings of the Edinburgh Mathematical Society**.

22. R. Diaconescu: *Interpolation for predefined types*, acceptata la Mathematical Structures in Computer Science, DOI:10.1017/S0960129511000430

23. R. Diaconescu: *Borrowing interpolation*, acceptata la Journal of Logic and Computation, DOI:10.1093/logcom/exr007

24. A. Diaconu, P. Garrett şi D. Goldfeld: *Natural boundaries and integral moments of L–functions,* acceptată în "Multiple Dirichlet Series and Applications to Automorphic Forms", **Progress in Mathematics, Birkhäuser**.

25. V. Dragan, H. Mukaidani, P. Shi: *The Linear Quadratic Regulator Problem for a Class of Controlled Systems Modeled by Singularly Perturbed Ito Differential Equations*, acceptata la SIAM Journal on Control and Optimization, 20 pagini.

26. Enescu Florian: *Finite dimensional vector spaces with Frobenius action*, acceptata la "Progress in Commutative Algebra. Ring Theory, Homology, and Decompositions" edited by Sean Sather-Wagstaff, Christopher Francisco, Lee Klingler, and Janet C. Vassilev, publisher: De Gruyter, Germany.

27. A. Gheondea, B.E. Ugurcan: *On two equivalent dilation theorems in VH-spaces*, acceptata la Complex Analysis Operator Theory.

28. M. Ghergu: **Lane-Emden systems with singular data** acceptată la Proc. Royal Society of Edinburgh: Section A (Mathematics)

29. H. Render, M. Ghergu: **Positivity properties for the clamped plate boundary problem on the ellipse and strip**, acceptată la Mathematische Nachrichten.

30. M. Ghergu, **A biharmonic equation with singular nonlinearity** acceptată la Proc. Edinburgh Math. Soc.

31. Gologan Radu: *"A billiard model in the plane close to the Lorez model"*, acceptata la Bulletin Mathematique de la Soiciete Roumaine de Mathematiques

32. Grecea Valentin: Jumps of the canonical Markov process associated with a Ray semigroup, Markov processes and related fields.

33. Ionescu-Kruse D.: *Elliptic and hyperelliptic functions describing the particle motion beneath small-amplitude water waves with constant vorticity*, acceptata la Discrete and Continuous Dynamical Systems-Series B, pag. 1–22.

34. P. Ionescu, F. Russo: *Manifolds covered by lines and the Hartshorne Conjecture for quadratic manifolds*, acceptata la Amer. J. Math.

35. M. Colţoiu, C. Joiţa: *The disk property of coverings of 1-convex surfaces*, acceptata la Proceedings of the AMS.

36. M. Colţoiu, C. Joiţa, Tibăr: *q-convexity properties of the coverings of a link singularity*, acceptata la Publ. Res. Inst. Math. Sci.

37. U. Kohlenbach, L. Leuştean: *On the computational content of convergence proofs via Banach limits*, acceptata la Philosophical Transactions of the Royal Society A, pag. 13.

38. A. Küronya, V. Lozovanu, C. Maclean, *Convex bodies appearing as Okounkov bodies of divisors*, preprint, `arXiv:1008.4431`, acceptata in *Advances in Mathematics*.

39. Mario Maican: *On the moduli spaces of semi-stable plane sheaves of dimension one and multiplicity five*, acceptata la "Illinois Journal of Mathematics", pag. 64

40. A. Libgober, L. Maxim: *Hodge polynomials of singular hypersurfaces*, acceptata la Michigan Math. Journal

41. L. Maxim, J. Schürmann: *Twisted genera of symmetric products*, acceptata la Selecta Mathematica

42. F. Castaño-Iglesias, C. Năstăsescu, L. Năstăsescu: *Locally stable Grothendieck categories. Applications*, acceptată la **Applied Categorical Structures**.

43. G. Nenciu, I. Nenciu: *On essential self-adjointness for magnetic Schroedinger and Pauli operators on the unit disc in* R^2 , acceptata la Letters in Mathematical Physics DOI: 10.1007/s11005-011-0506-9

44. David Hobby, Barna Laszlo Iantovics, Florin Felix Nichita: *On Computational Methods and the Yang-Baxter Equations*, acceptata la Proc. Rom. Acad.

45. L. Ornea, R. Pantilie: *On holomorphic maps and Generalized Complex Geometry*, acceptata la Journal of Geometry and Physics.

46. Liviu Ornea, Misha Verbitski: *Locally conformally Kaehler manifolds admitting a holomorphic conformal flow*, acceptata la Mathematische Zeitschrift, pag. 9

47. Stefano Marchiafava, Liviu Ornea, Radu Pantilie: *Twistor theory for CR quaternionic manifolds and related structures*, acceptata la Monatshefte fuer Mathematik, pag. 16

48. M. Ciungu, F. Panaite: *L-R-smash products and L-R-twisted tensor products of algebras*, acceptata la **Algebra Colloquium**

49. F. Panaite: *More examples of invariance under twisting*, acceptata la **Czechoslovak Mathematical Journal**

50. F. Panaite: *Invariance under twisting for crossed products*, acceptata la **Proceedings of the American Mathematical Society**

51. Mihaela Pilca: *A Note on the Conformal Invariance of G-Generalized Gradients*, acceptata la Internat. J. Math., DOI:10.1142/S0129167X11007355.

52. A.A. Popa: *Rational decomposition of modular forms*, **Ramanujan Journal of Math.** (2011), aparuta online DOI: 10.1007/s11139-011-9301-6

53. J. Herzog, D. Popescu, M. Vladoiu: *Stanley depth and size of a monomial ideal*, **Proceedings of AMS 140** (2012), pag. 493 -504

54. D. Popescu: *Graph and depth of a square free monomial ideal*, acceptata la Proceedings AMS, pag. ...

55. D. Popescu: *Depth and minimal number of generators of square free monomial ideals*, acceptata la An. Sc. Univ. Ovidius, Constanta

56. Măntoiu, Marius; **Purice, Radu**; Richard, Serge: *Positive Quantization in the Presence of a Variable Magnetic Field*, acceptata la **Journal of Mathematical Physics 52**, 112101- 15 pg.

57. Cornean, Horia; Duclos, Pierre; **Purice, Radu**: *Adiabatic Non-Equilibrium Steady States in the Partition Free Approach*, acceptata la **Annales Henri Poincare**.

58. Cornean, Horia; **Purice, Radu**: *On the regularity of the Hausdorff distance between spectra of perturbed magnetic Hamiltonians*, acceptata la **Operator Theory: Advances and Applications**, Birkhäuser - Springer.

59. B. Prunaru: *A factorization theorem for multiplier algebras of reproducing kernel Hilbert spaces*, acceptata la Canadian Mathematical Bulletin,
pag. http://cms.math.ca/10.4153/CMB-2011-174-x

60. Mihai Prunescu: *Recurrent two-dimensional sequences generated by homomorphisms of finite abelian p-groups with periodic initial conditions*, acceptata la Fractals, probabil apare in Decembrie 2011.

61. V. Rădulescu, D. Repovš: *Combined effects in nonlinear problems arising in the study of anisotropic continuous media*, acceptata la Nonlinear Analysis, T.M.A., pag. 7.

62. T. Rădulescu, V. Rădulescu: *A 21st century mathematical renaissance*, acceptata la The Psychology of the Mathematician, Mathematical Association of America (P. Casazza, S. Krantz, Eds.), pag. 9.

63. G. Bonanno and G. Molica Bisci, V. Rădulescu: *Arbitrarily small weak solutions for a nonlinear eigenvalue problem in Orlicz-Sobolev spaces*, acceptata la Monatshefte für Mathematik, pag. 12.

64. N. Costea, V. Rădulescu: *Inequality problems of quasi-hemivariational type involving set-valued operators and a nonlinear term*, acceptata la J. Global Optimization, pag. 14.

65. V. Rădulescu: *Noncoercive elliptic equations with subcritical growth*, acceptata la Discrete and Continuous Dynamical Systems – Series S, pag. 8.

66. M. Boureanu, V. Rădulescu: *Anisotropic Neumann problems in Sobolev spaces with variable exponent*, acceptata la Nonlinear Analysis, T.M.A., pag. 18.

67. G. Bonanno and G. Molica Bisci, V. Rădulescu: *A note on elliptic equations involving the critical Sobolev exponent*, acceptata la International Conference on Differential & Difference Equations and Applications: Conference in honour of Professor Ravi P. Agarwal, Springer Proceedings in Mathematics, pag. 9.

68. V. Rădulescu: *Critical Point Theory*, acceptata pentru volumul *Selected Papers of James Serrin*, Contemporary Mathematicians, Birkhäuser, Basel, sub tipar.

69. P. Pucci, V. Rădulescu, H. Weinberger (Editori), *Selected Papers of James Serrin*, două volume, 1200 pp., Contemporary Mathematicians, Birkhäuser, Basel, sub tipar.

70. E. Kilic, P. Stanica, *General approach in computing sums of products of binary sequences*, Journal of Computational and Applied Mathematics.

71. J. Fox, R. Gera, P. Stanica, *The Independence Number for the Generalized Petersen Graphs*, accepted in Ars Combinatoria.

72. E. Kilic, P. Stanica, *Generating matrices of C-nomial coefficients and their spectra*, accepted Proc. International Conf. Fibonacci Numbers & Applic.

73. T.W. Cusick, P. Stanica, *Nonoverlap property of the Thue-Morse sequence*, accepted Proc. International Conf. Fibonacci Numbers & Applic.

74. M. Barboteu, M. Sofonea, D.Tiba: *The control variational method for beams in contact with deformable obstacles¿*, acceptata la ZAMM, pag. 22

75. Elizabeth Strouse, Dan Timotin, Mohamed Zarrabi: *Unitary equivalence to truncated Toeplitz operators*, acceptată la Indiana Univ. Math. J.

76. M. Holland, M. Nicol, A. Török. *Extreme value theory for non-uniformly hyperbolic dynamical systems*, acceptată la Trans. AMS

77. I. Melbourne, V. Niţică, A. Török. *Transitivity of Heisenberg group extensions of hyperbolic systems*, acceptată la *Ergodic Theory and Dynamical Systems*

78. I. Melbourne, A. Török. *Convergence of moments for Axiom A and nonuniformly hyperbolic flows*, acceptată la *Ergodic Theory and Dynamical Systems*

79. Ilie Valuşescu: *Notes on continuous parameter periodically* Γ*-correlated processes*, acceptată la An. Univ. Timişoara, 10 pag. (In curs de aparitie).

80. Jin-ichi Itoh, Costin Vîlcu: *Cut locus structures on graphs*, acceptata la Discrete Math., http://www.sciencedirect.com/science/article/pii/S0012365X1100121X

81. Kouchi Ieiri, Jin-ichi Itoh, Costin Vîlcu: *Quasigeodesics and farthest points on convex surfaces*, acceptata la Adv. Geometry, http://www.reference-global.com/doi/abs/10.1515/ADVGEOM.2011.033. Va apare in numarul 4 (Oct.) 2011 al revistei, foarte probabil in zilele urmatoare: http://www.reference-global.com/loi/advg

82. V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu: *Representation Results for Equivariant Rigid Analytic Functions*, acceptata la Algebr. Represent. Theory. (Revista ISI.)

83. S. Achimescu, V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu. *The behavior of rigid analytic functions around orbits of elements of* $\mathbf{C_p}$, acceptata la Rend. Semin. Mat. Univ. Padova. (Revista ISI.)

84. A. I. Bonciocat, N. C. Bonciocat, A. Zaharescu: *Bounds for the multiplicities of the roots of a complex polynomial*, acceptata la Proc. Edinburgh Math. Soc., pag. 8.

85. M. Xiong, A. Zaharescu: *Statistics of the Jacobians of hyperelliptic curves over finite fields*, acceptata la Math. Res. Lett., pag. 38.

86. B. C. Berndt, Sun Kim, A. Zaharescu: *Weighted divisor sums and Bessel function series, II*, acceptata la Adv. Math., pag. 40.

7.4 Preprinturi electronice

1. Marian Aprodu, Gavril Farkas: *Green's Conjecture for general covers*, preprint arXiv:1105.3933.

2. Gruia Arsu: *On Kato-Sobolev spaces*, preprint http://arxiv.org/abs/1110.6337

3. I. Beltiţă, D. Beltiţă: *Faithful representations of infinite-dimensional nilpotent Lie algebras*, preprint arXiv:1108.5563v1 [math.RT]/2011, 8 pagini.

4. Samia Ashraf, Haniya Azam, Barbu Berceanu: *Representation stability of power sets and square free polynomials*, preprint arXiv: 1106.4926 [math.RT] 27.06.2011, 14 pag.

5. A.I. Bonciocat: *Lower Ricci curvature bounds for metric measure spaces*, preprint 2011, pag. 25.

6. Vasile Brinzanescu, Andrei D. Halanay, Gunther Trautmann: *Vector Bundles on non-Kahler Calabi-Yau type 3-folds*, preprint arXiv:1008.3365, pag. 16

7. Marius Buliga, Géry de Saxcé, Claude Vallée: *A variational formulation for constitutive laws described by bipotentials*, preprint arXiv:1110.6598

8. Marius Buliga: *Normed groupoids with dilations*, preprint arXiv:1107.2823

9. Marius Buliga: *Maps of metric spaces*, preprint arXiv:1107.2817

10. Marius Buliga: *Computing with space: a tangle formalism for chora and difference*, preprint arXiv:1103.6007

11. S. Burciu: *Depth one extensions of semisimple algebras and Hopf subalgebras*, preprint arxiv.org/abs/1103.0685 numar/2011, pag. 10

12. Dorin Cheptea, *Determination of perturbative invariants of 3-dimensional manifolds by weight systems*, trimis spre publicare la revistă ISI (înca nu am răspuns)

13. Dorin Cheptea, Karl Magnus Jacobsson, $U(N)$ *weight system specification of the LMO functor*, preprint

14. Mircea Cimpoeas: *Vertex cover algebras of simplicial multicomplexes*, http://arxiv.org/pdf/1101.4379.

15. Mircea Cimpoeas: *Multigraded modules of Borel type*, http://arxiv.org/pdf/1105.5638 .

16. Mircea Cimpoeas: *Regularity of symbolic and bracket powers of Borel type ideals*, http://arxiv.org/pdf/1106.4029 .

17. Mircea Cimpoeas: *Several inequalities regarding sdepth*, http://arxiv.org/pdf/1107.3359 .

18. Mircea Cimpoeas: *A note on Stanley conjecture for monomial ideals*, http://arxiv.org/pdf/1111.1550 .

19. A.C. Cojocaru, Á. Tóth: *Distribution and growth of the elementary divisors of the reductions of an elliptic curve of an elliptic curve over a function field*, preprint, trimis spre publicare.

20. A.C. Cojocaru, D. Shulman: *Almost all reductions of a generic Drinfeld module of arbitrary rank have a large exponent*, preprint, trimis spre publicare.

21. A.C. Cojocaru, D. Shulman: *An average Chebotarev density theorem for generic rank 2 Drinfeld modules with complex multiplication*, preprint, trimis spre publicare.

22. Alexandru Constantinescu, Matteo Varbaro:
On the h-vectors of Cohen-Macaulay Flag Complexes,
acceptat pentru publicare în **Mathematica Scandinavica**.

23. Alexandru Constantinescu, Matteo Varbaro:
Pure O-sequences and h-vectors of Matroids

24. N. Dan: *Sur la conjecture de Zagier pour* $n = 4.II$, **arXiv**:1101.1557 [math.KT]

25. Aberbach Ian, Enescu Florian: *New estimates of Hilbert-Kunz multiplicities for local rings of fixed dimension*, preprint 2011, Georgia State University, de asemenea arXiv:1101.5078.

26. Zaheer AHMAD, Tiberiu DUMITRESCU si Mihai EPURE: *A SCHREIER DOMAIN TYPE CONDITION* (7 pagini)

27. Mihai Fulger: *Local volumes on normal algebraic varieties*, preprint arXiv:1105.2981v1 [math.AG]/2011, pag. 1–43

28. Bogdan Canepa, Radu Gaba *On some special classes of complex elliptic curves*, preprint arXiv: 1111.1073, pag. 1-15.

29. M. Coltoiu, C. Joita: *Convexity properties of coverings of 1-convex surfaces*, arXix: 1110. 5971

30. L. David, I.A.B. Strachan: *Symmetries of F-manifolds with eventual identities and special family of connections*, arxiv:1103.2045 (2011), 26 pagini.

31. M. Colţoiu, C. Joiţa: *Convexity properties of coverings of 1-convex surfaces.*, preprint, arXiv:1110.5791

32. U. Kohlenbach, L. Leuştean: *Effective metastability of Halpern iterates in CAT(0) spaces*, preprint arXiv:1107.3215v2 [math.FA]/2011, pag. 28.

33. Mario Maican: *On the moduli space of semi-stable plane sheaves with Euler characteristic one and supported on sextic curves*, preprint arXiv:1105.0112/2011, pag. 33

34. Mario Maican: *On the moduli space of semi-stable plane sheaves with Hilbert polynomial* $\mathrm{P}(m) = 6m + 2$, preprint arXiv:1109.3918/2011, pag. 24

35. Daniele Faenzi, Daniel Matei, Jean Valles : *Hyperplane arrangements of Torelli type*, preprint arXiv:1011.4611

36. S. Cappell, L. Maxim, J. Schürmann,J. Shaneson: *Equivariant characteristic classes of complex algebraic varieties*, arXiv:1004.1844.

37. S. Cappell, L. Maxim, J. Schürmann,J. Shaneson, S. Yokura: *Characteristic classes of symmetric products of complex quasi-projective varieties*, arXiv:1008.4299.

38. M. Banagl, L. Maxim: *Deformation of Singularities and the Homology of Intersection Spaces*, arXiv:1101.4883.

39. Mihailescu Eugen: *Inverse limits and statistical properties for some implicitly defined economic models*, preprint IMAR numar/2011, pag. ...

40. Sergiu Moroianu: *Uniformization of S^2 and flat singular surfaces*,
preprint arXiv:1101.2355 (2011).

41. Colin Guillarmou, Sergiu Moroianu: *Chern-Simons line bundle on Teichmller space* ,
preprint arXiv:1102.1981 (2011).

42. Andrei Moroianu, Sergiu Moroianu: *The Cauchy problem for metrics with parallel spinors*,
preprint arXiv:1106.2066 (2011).

43. Andrei Negut: *Push-forwards on Projective Towers*,

44. Andrei Negut: *Affine Laumon Spaces and Integrable Systems*,

45. Andrei Negut: *Yangians of $\widehat{\mathfrak{gl}_n}$ and Affine Laumon Spaces*,

46. L.-C. Li, I. Nenciu: *The periodic defocusing Ablowitz-Ladik equation and the geometry of Floquet CMV matrices*, preprint arXiv:1103.4596, trimis spre publicare.

47. I. Nenciu: *A note on Poisson bracket for orthogonal polynomials on the unit circle*, preprint, arXiv:math/0701055, versiunea 3, revizuit si trimis spre publicare.

48. Florin F. Nichita: *Lie algebras and Yang-Baxter equations*, arXiv:1107.0920, Quantum Algebra (math.QA); High Energy Physics - Theory (hep-th)/2011, pag. 1-13.

49. Florin F. Nichita: *Algebraic Models for Transdisciplinarity*, Centre International de Recherches et Etudes Transdisciplinaires (CIRET); Pratique de la transdisciplinarite; March 2011 (http://basarab.nicolescu.perso.sfr.fr/ciret).

50. Florin F. Nichita: *Asupra unui model algebric pentru transdisciplinaritate*, The Institute for Transdisciplinary Studies in Science, Spirituality, Society; Articles; February 2011 (http://www.it4s.ro).

51. Liviu Ornea, Misha Verbitsky, Victor Vuletescu: *Blow-ups of locally conformally Kaehler manifolds* , preprint arxiv:1108.4885/2011, pag. 12

52. Akito Futaki, K. Hattori, Liviu Ornea: *An integral invariant from the viewpoint of locally conformally Kaehler geometry* , preprint arXiv:1105.4774/2011, pag. 12

53. H. Albuquerque, F. Panaite: *Some (Hopf) algebraic properties of circulant matrices*, arXiv:math.RA/1110.1546

54. S. Marchiafava, R. Pantilie: *Twistor Theory for co-CR quaternionic manifolds and related structures*, preprint arXiv:1106.5431 / 2011.

55. S. Marchiafava, R. Pantilie: *A note on CR quaternionic maps*, preprint arXiv:1108.3199 / 2011.

56. R. Pantilie: *On the classification of the real vector subspaces of a quaternionic vector space*, preprint arXiv:1109.6467 / 2011.

57. R. Pantilie: *Generalized quaternionic manifolds*, preprint arXiv:1109.6475 / 2011.

58. S. Papadima, A. Suciu: *Homological finiteness in the Johnson filtration of the automorphism group of a free group*, preprint `arXiv:1011.5292` (2010), 32 pag.

59. A. Dimca, R. Hain, S. Papadima: *The abelianization of the Johnson kernel*, preprint `arXiv:1101.1392` (2011), 16 pag.

60. Ovidiu Păsărescu: *Curves on Rational Surfaces with Hyperelliptic Hyperplane sections*, preprint arXiv 1101.0577v1[mathAG] /2011, pag. 1-39.

61. Mihaela Pilca, Andrei Moroianu: *Higher Rank Homogeneous Clifford Structures*, preprint arXiv:1110.4260v1 [math.DG]

62. F.B. Boca, V. Pasol, A.A. Popa, A. Zaharescu: *Pair correlation of angles between reciprocal geodesics on the modular surface* , preprint, arxiv:1102.0328

63. D. Popescu: *Depth of factors of square free monomial ideals*, preprint arXiv 1110.1963/2011, pag. ...

64. M. Ledoux, I. Popescu: *The One Dimensional Free Poincaré Inequality*, preprint arxiv.org arXiv:1105.2031v2, 2011.

65. B. Prunaru: *Tsirelson's problem and purely atomic von Neumann algebras*, preprint arXiv:1110.0661v1 [math.OA]/2011, pag. http://arxiv.org/abs/1110.0661

66. B. Prunaru: *Lifting fixed points of completely positive semigroups*, preprint arXiv:1106.2521v3 [math.OA]/2011, pag. http://arxiv.org/abs/1106.2521

67. Mihai Prunescu: $\mathbb{F}_p$*-affine recurrent double sequences over* $\mathbb{F}_q$ *are p-automatic*, preprint Universitatea Freiburg, Germania. http://home.mathematik.uni-freiburg.de/prunescu/fpaffine.pdf.

68. Mihai Prunescu: *Contributie la Online Enciclopedia of Tilings* http://tilings.math.uni-bielefeld.de/people/m_prunescu

69. Claudiu Raicu: *Secant Varieties of Segre–Veronese Varieties*, preprint arXiv: 1011.5867.

70. R. Răsdeaconu, I. Şuvaina: *Tian-Yau metrics and cyclic quotient singularities*, http://arxiv.org/find/all/1/au:+rasdeaconu/0/1/0/all/0/1

71. Elizabeth Strouse, Dan Timotin, Mohamed Zarrabi: *Unitary equivalence to truncated Toeplitz operators*, preprint arXiv:1001.6055 pe www.arxiv.org.

72. Isabelle Chalendar, Emmanuel Fricain, Dan Timotin: *A short note on the Feichtinger Conjecture*, preprint arXiv:1106.3408 pe www.arxiv.org.

73. S.Waleed Noor, Dan Timotin: *Embeddings of Müntz spaces: the Hilbertian case* , preprint arXiv:1110.5422 pe www.arxiv.org.

74. Joseph O'Rourke, Costin Vîlcu: *Conical Existence of Closed Curves on Convex Polyhedra*, preprint arXiv:1102.0823v2, 4 Feb 2011, 24 pag.

75. Jin-ichi Itoh, Costin Vîlcu: *Cut locus structures on graphs*, preprint arXiv:1103.1758v1, 9 Mar 2011, 16 pag.

76. Jin-ichi Itoh, Costin Vîlcu: *Every graph is a cut locus*, preprint arXiv:1103.1759v2, 9 Mar 2011, 14 pag.

77. Jin-ichi Itoh, Costin Vîlcu: *On the number of cut locus structures on graphs*, preprint arXiv:1103.1764v1, 9 Mar 2011, 13 pag.

78. Jin-ichi Itoh, Costin Vîlcu: *Orientable cut locus structures on graphs*, preprint arXiv:1103.3136v1, 16 Mar 2011, 24 pag.

79. V. Alexandru, N. Popescu, M. Vâjâitu, A. Zaharescu, *On the zeros of rigid analytic functions*, submisa.

80. M. Vâjâitu, A. Zaharescu: *An algebraic-metric equivalence relation over p-adic fields*, in progress.

81. V. Alexandru, M. Vâjâitu, A. Zaharescu: *On p-adic analytic continuation with applications to generating elements*, in progress.

7.5 Preprinturi tiparite

1. T. Albu: *The Osofsky-Smith Theorem for modular lattices, and applications (I)*, preprint Institutul de Matematica "Simion Stoilow" al Academiei Romane, Nr.1 / 2011, 18 pagini.

2. Marian Anton: *Pasch's Axiom in Sensor Networks*, preprint Ripon College 2011

3. Samia Ashraf, Haniya Azam, Barbu Berceanu: *Representation stability of power sets and square free polynomials*, preprint Abdus Salam School of Mathematical Sciences, nr. 339, 2011.

4. Adrian Constantinescu: *Open embeddings of algebraic varieties in schemes.IV-1 : Residue fields of Noetherian subalgebras*, preprint in Preprint Series of the Institute of Mathematics of the Romanian Academy, ISSN 0250 3638, 2011, pag. 14.

5. A. Diaconu şi V. Paşol: *Trace Formulas, Character Sums, and Multiple Dirichlet Series,* Preprint, 2011.

6. Cristian Făciu and Alain Molinari : *The structure of shock and interphase layers for a heat conducting Maxwellian rate-type approach to solid-solid phase transitions. Part I: Thermodynamics and admissibility.*, IMAR Preprint Series 6/2011, pag. 1–33.

7. L. Dupaigne, M. Ghergu, O. Goubet, G. Warnault: *Entire Large solutions for semilinear elliptic equations*, preprint arxiv/2011, pag. 1-27.

8. I. Gruais, D. Poliševski: *Homogenizing the Darcy/Stokes coupling*, preprint Institut de Mathématique de Rennes, 11-34/2011, pag. 1–14

9. C. Gupta, W. Ott, A. Török. *Memory loss for time-dependent piecewise expanding systems in higher dimension*

10. Ursu V.: *The smallest nonabelian nilpotent quasivarieties of Moufang loops*, Preprint Series of the Institute of Mathematics of the Romanian Academy, P.O. Box-1765, Bucuresti, Romania, no. 5/2011, pag. 17. ISSN 0250-3638

11. Ilie Valusescu: Γ-*correlated processes. Some geometrical considerations*, preprint IMAR 7/2011, pag. 12.

12. I. Molnar, C. Varsan: *The characteristic system method for linear higher-order SPDEs of parabolic type*, preprint IMAR 9/2011, pag. 10

8 Alte activitati

Dumitrescu Olivia - Participare in cadrul programului 'Algebraic geometry with a view towards applications', Mittag-Leffler Institute, April-May 2011
Instructor, Graduate Algebra, U.C. Davis, Fall Quarter 2010.

Molnar Ionel - Participare la realizarea proiectului **Sistem bioinformatic pentru analiza conformatiei proteinelor**, nr. proiect 62-056/2008, desfasurat in perioada 2009-2011, in cadrul programului **Parteneriate in domenii prioritare** in colaborare cu Institutul National de Cercetare-Dezvoltare pentru Stiinte Biologice. Cercetarea desfasurata in cadrul proiectului s-a focalizat pe identificarea/studiul unor algoritmi si apoi scrierea unor proceduri in limbaje de programare de inalt nivel, (in speta Perl/BioPerl si Python) pentru analiza secventiala a ADN, (identificarea de *situri restrictie*, efectuarea de *restrictii digest* sau crearea de *harti restrictie*, etc.) cat si scrierea unor programe pentru gasirea si extragerea selectiva a informatiilor din bancile/bazele de date genetice (precum GenBank NCBI, DNA Data Bank).

8.1 Comisii de Doctorat

Purice Radu - Referent în Comisia de Doctorat a Dlui Max Lein de la Universitatea Tehnică din München, sub conducerea Prof. Herbert Spohn.

8.2 Conducere granturi

Albu Toma - Grant **PN II - IDEI 443, code 1190/2008**, oferit de CNCSIS - UEFISCSU cu titlul "*Ireductibilitate, Factorizari, Dimensiune Krull si Aspectele lor Computationale in Polinoame, Inele, Module, Latici si Categorii Grothendieck*".

Aprodu Marian - PN-II-ID-PCE- 2011-3-0288 (contract nr. 132/05.10.2011)

Beltita Daniel

- Daniel Beltiţă este director al proiectului *Structuri geometrice în analiza funcţională - Cuantificări de varietăţi infinit dimensionale*, contract PN II, Programul "Idei", cod ID 1194, derulat în intervalul 2009–2011.
- Daniel Beltiţă este director al proiectului *Calcul operatorial pentru reprezentări de grupuri Lie, cu aplicaţii la ecuaţii cu derivate parţiale si fizica cuantică*, Programul "Idei", cod proiect: PN-II-ID-PCE-2011-3-0131. Proiectul a fost acceptat pentru finanţare în urma competiţiei PCE2011, şi urmează să se deruleze în intervalul 2012–2014.

Beznea Lucian
– Grant CNCSIS (PN II, Proiecte de cercetare exploratorie, Competitia 2008), cod CNCSIS 1186, Probleme actuale in teoria potentialului si analiza complexa. Director de proiect.
– Proiect Complex "Sisteme diferentiale in analiza neliniara si aplicatii" (CNCSIS PCCE-55/2008). Responsabil partener IMAR.

Brinzanescu Vasile - Sunt manger la proiectul POSDRU 62988 pentru partenerul IMAR, proiect de burse postdoctorale

Buliga Marius - Continuarea proiectului LEA "Bipotentials for non monotone multivalued operators: fundamental results and applications", în colaborare cu Géry de Saxcé (Lille I) şi Claude Vallée.

Impreuna cu Laurenţiu Leuştean am inceput, din octombrie 2011, proiectul PN-II-ID-PCE-2011-3-0383 "Proof mining in metric anaysis, geometric group theory and ergodic theory".

Burciu Sebastian - Sunt directorul Grantului Postdoctoral Individual CNCSIS PN II RU PD 168/27.08.2010 si benefeciez de o bursa PosDru la Universitatea Bucuresti, Facultatea de Matematica si Informatica.

Calinescu Corina - In 2011 am primit grantul "Anne Coffin Hanson Grant", Yale.

Chiose Ionut - Marie Curie International Reintegration Grant

Cojocaru Alina-Carmen - DMS- 0747724, National Science Foundation Career Award, SUA,.

Coltoiu Mihnea

1. grant CNCSIS PN II ID 1185 2009-2011

2. grant CNCSIS PN II ID contract 145/05.10.2011 2012-2014

David Liana - Conduc un grant PN-II-IDEI, cod 1187/2008, care se va incheia in data de 15 decembrie 2011. Titlul proiectului: **Structuri geometrice pe varietati diferentiabile**.

Diaconescu Razvan - PN-II-ID-PCE-2011-3-0439 (Metode de logică universală pentru informatică)

Diaconu Calin Adrian - Conducător ştiinţific, grant NSF (National Science Foundation, SUA), pe perioada 2007-2012 (doi ani extensie).

Dinu Florin Liviu - Responsabil IMAR pentru Grantul PN2 *"Nonlinear evolution, quasi coherence and transport in the turbulence of fluids",* No.573, 2009−2011.

Faciu Cristian - Coordonator echipa de cercetare a IMAR in cadrul Proiectului complex de cercetare exploratorie PN-II-PCCE-ID-100/2010, **Modelarea continuă - de la micro la macro scară - a materialelor avansate in fabricaţia virtuală**. Director proiect Prof. D. Banabic, Universitatea Tehnică din Cluj-Napoca.

Ignat Liviu - In acest moment sunt director al urmatoarelor granturi:
1. Proiect TE 4/2010, competitie 2010, suma totala = 750.000 RON
2. Proiect IDEI, PN-II-ID-PCE-2011-3-0075, competitie 2011, suma totala = 1.500.000 RON

Leustean Laurentiu - Grant IDEI PN-II-ID-PCE-2011-3-0383 "Metode efective in analiza metrică, teoria geometrică a grupurilor şi teoria ergodică" (2011-2014)

Maxim Laurentiu

1. National Science Foundation grant DMS-1005338:
   "Geometry and Topology of Singularities", 2010-2013.

2. National Science Foundation grant DMS-1104329: "International Conference on Singularity Theory and Applications".

Macinic Anca - Din 5 octombrie 2011 sunt directorul unui proiect de cercetare de tip postdoc finantat de CNCSIS, cu titlul "Metode algebrice si combinatoriale in topologie".

Mihailescu Eugen - In anul 2011 am condus in calitate de Director Proiect, grantul **Invarianti Numerici si Proprietati Geometrice pentru Clase de Sisteme Dinamice**, PN II-Idei 2008.

Moroianu Sergiu - Grant CNCSIS PNII-ID-1188 "Geometric and Quantum invariants of 3-manifolds"

Nenciu Irina - Conducator principal al grantului DMS-0701026 al National Science Foundation, USA, "Integrable systems and random matrices", 2007 – 2012.

Nitica Viorel - Simons Foundation, Collaboration Grants for Mathematicians $35,000, 2011-2016

Ornea Liviu - Grant 525/2009 CNCSIS, derulat la Universitatea din Bucureşti.

Pantilie Radu - Teorie twistor pentru aplicaţii şi morfisme armonice între spaţii simetrice riemanniene, Grant CNCSIS, PN II Idei, cod 1193.

Papadima Stefan - Director de proiect, grant CNCSIS (Proiecte de cercetare exploratorie) 530/2009-2011: *Conexiuni, stabilitate si aplicatii in geometrie algebrica, topologie si teoria grupurilor.*

Pasol Vicentiu - Director Proiect CNCSIS PD-171.

Popa A. Alexandru - Grant Marie Curie de reintegrare "Periods of modular forms" in cadrul FP7, cu un buget de 100,000 euro, pe perioada Octombrie 2009-Septembrie 2013

Popescu Dorin - Director PN II Program, CNCSIS 542/2008 care sfarseste la 31 Decembrie 2011. Director P Idei Program, CNCS 247/2011 care incepe la 1 ianuarie 2012.

Popescu Ionel

1. Reintegration Grant Marie Curie 249200 SAMTFP "Stochastic Analysis, Mass Transportation and Free Probability".

2. CNSC PN-II-RU-TE-2011-3-0259 "Randomness, Geometric Problems and Functional Inequalities "

Purice Radu

1. Manager Proiect POSDRU/107/1.5/S/82514.

2. Membru in echipa de management a proiectului POSDRU/89/1.5/S/62988.

3. Co-director roman al Laboratorului European Asociat CNRS Math-Mode.

Radulescu Vicentiu

1. Grant CNCSIS PCCE 55/2008, "Sisteme diferenţiale în analiza neliniară şi aplicaţii" (2010-2013)

2. Grant CNCSIS PN-II-ID-PCE-2011-3-0195 "Qualitative and numerical analysis of nonlinear problems on fractals" (2011-2014)

Stanica Pantelimon - NPS-GSEAS Deans's Cyber Security Research Grant

Tiba Dan - Grant 1192 CNCS; Grant LEA; Granta Brancusi

Timofte Aida - Visiting Assistant Professor, University of Mississippi, Department of Mathematics, 15.08.2010–15.05.2011.

Timofte Vlad - Visiting Associate Professor, University of Mississippi, Department of Mathematics, 01 ianuarie – 15 mai 2011.

Timotin Dan - In calitate de director de proiect, am obţinut în cadrul competiţiei 2011 a programului IDEI-PCE un grant de 36 de luni, în valoare de 1487500 lei. Titlul proiectului este *Teoria operatorilor multidimensională. Spaţii cu nucleu reproducător, funcţii necomutative, probleme de momente şi rezultate de dilatare generalizată*, cod PN-II-ID-PCE-2011-3-0119.

Vajaitu Marian - "Scientist in charge" pentru grantul FP7-PEOPLE-RG-248569 (2009-2013), director Alex Popa, IMAR.

Zamfirescu Tudor - Conduc grantul PN-II-ID-PCE-2011-3-0533 începând cu 2011.

8.3 Conducere doctorate

Albu Toma

1. *Minculete Nicuşor*, stadiu de **depunere** a Tezei

2. *Apostol Brăduţ*, stadiu de **elaborare** a Tezei

3. *Petrescu Lucian*, stadiu de **elaborare** a Tezei

Beltita Daniel

- Daniel Beltiţă este conducător de doctorat al lui Mihai Nicolae, admis la programul de doctorat în urma colocviului din octombrie 2011, şi înmatriculat la 1 noiembrie 2011. Tema propusă pentru teza de doctorat este *Momente pentru reprezentări de grupuri Lie*.

Berceanu Barbu Doua dintre doctorandele de la Abdus Salam School of Mathematical Sciences si-au sustinut tezele in martie 2011:

- Saima Parveen, *"Braid groups in complex projective spaces"* ;

- Rehana Ashraf, *"Recurrence relations for HOMFLY polynomials and rational specializations"* .

Alte doua doctorande de la ASSMS sint in faza de redactare a tezelor.

Beznea Lucian
Marian Haiducu, stagiu de pregatire
Andrei Oprina, stagiu de pregatire
Daniela Ghita, stagiu de pregatire
Ana Maria Boeangiu, stagiu de pregatire
Oana Valeria Lupascu, stagiu de pregatire.

Boca Florin-Petre - Joseph Vandehey, University of Illinois Urbana-Champaign.

Brinzanescu Vasile - Doctorandul Marius Marchitan a sustinut in 2011 teza de doctorat cu tema: Fibrati vectoriali pe suprafete complexe.

Cojocaru Alina-Carmen - Drew Shulman, Universitatea Illinois-Chicago, SUA. Teza: *Elementary divisors of reductions of generic Drinfeld modules*, sustinuta in mai 2011; doctorat conferit in august 2011.

Coltoiu Mihnea - 3 doctoranzi : Geroge Ionut Ionita, Natalia Gasitoi, Ovidiu Preda

Diaconescu Razvan - *Madeira, Alexandre*, **Behavioural Certification of Evolving Sofware Requirements**, în cadrul MAP-i (program doctoral comun în informatică al universităţilor Minho, Aveiro şi Porto, Portugalia).

Ene Horia - Am continuat activitatea de conducere doctorate. S-au sustinut doua teze:
1. Camelia Gheldiu - Omogenizarea structurilor reticulate (controlabilitate exacta interna pentru structuri subtiri inalte tip fagure)
2. Mihaela Arsene - Metode calitative pentru studiul unor ecuatii diferentiale si sisteme diferentiale care modeleaza fenomene mecanice

Enescu Florian - Conducere la doctorat a Sarei Malec, student la doctorat in matematica (algebra comutativa) la Georgia State University.

Maxim Laurentiu

1. Yun Su (University of Wisconsin-Madison)

2. Kai Ho Wong (University of Wisconsin-Madison)

3. Yongqian Liu (University of Science and Technology of China)

Nastasescu Constantin - În anul 2011 şi-au susţinut cu succes teza trei doctoranzi ai mei (Buruiană Cerasela, Toader Nicolae Bogdan şi Angheluţă Carmen Florentina). În prezent, am doi doctoranzi în diverse stadii de elaborare a tezei.

Nenciu Irina - Deniz Bilman, student la doctorat, Departamentul de Matematica, University of Illinois at Chicago

Ornea Liviu - Da, la Universitatea din Bucuresti, 2 doctoranzi, o teza finalizata in octombrie 2011 (Rodica Voicu).

Polisevschi Dan

1. Dumitru Adina, inmatriculata in 2005, a sustinut ultimul referat
2. Cristian Cotoarba, inmatriculat in 2009, a sustinut al doilea examen
3. Florentina-Alina Stanescu, inmatriculata in 2010, admisa cu frecventa in cadrul Institutului de Matematica "Simion Stoilow" al Academiei Romane, a sustinut primul examen

Popescu Dorin - Am continuat sa lucrez cu doctoranzii mei mai vechi: Corneliu Manescu Avram si Mihai Epure in tara si cu Muhammad Ishaq din Pakistan. D-l Imran Qureshi din Pakistan si-a sustinut teza in Februarie 2011 in Lahore. Am inceput sa lucrez cu noii mei doctoranzi: A. Zarojanu si G. Teseleanu.

Radulescu Vicentiu - In prezent am 7 doctoranzi, aflaţi în diverse stadii de pregătire a tezei. Este prevăzută susţinerea a două teze de doctorat în decursul anului 2012.

Stanica Pantelimon

1. Syridon Pollatos, 2008–
2. Thor Martinsen, 2010–
3. Jong Chung, 2010–

Tiba Dan - Doctorand Merlusca Diana (din 2010)

Timotin Dan - Conduc, la *Abdus Salam School of Mathematical Sciences, GC University* de la Lahore, Pakistan, doctoratul lui Waleed Noor.

Torok Andrei - Supervizez in prezent trei studenţi: unul în ecuaţii diferenţiale stochastice pentru modelarea sistemelor biologice (împreună cu R. Azencott) şi doi în sisteme dinamice.

Ursu Vasile - Consultant stiintific tezei de doctor dnei Gurdis Aliona cu tema "Bucle Moufang comutative si CH-cuasigrupuri cu conditii de finitudine". Teza a fost sustinuta pe 26 martie 2010 in sedinta Consiliului stiintfic specializat DH 01.01.01.06 - 03 din cadrul Institutului de Matematica si Informatica al Academiei de Stiinte a Moldovei.

Vajaitu Marian - Nitu Cosmin Constantin, in stadiul de pregatire. A sustinut in acest an, conform planului de lucru, primul examen si referat in cadrul programului de doctorat.

8.4 Membru in colective editoriale

Albu Toma

1. Revista "*Gazeta Matematica*", din 1980.
2. Revista "*Bulletin Mathematique de la Societe des Sciences Mathematiques de Roumanie*", din 2004.
3. Revista "*Communications in Algebra*", Taylor & Francis Group, Philadelphia (fost Marcel Dekker, Inc., New York), din 2005.

Beznea Lucian - Advances in Pure and Applied Mathematics, de Gruyter (http://www.degruyter.com/journals/apam/detailEn.cfm?sel=he)

Brinzanescu Vasile - Editor la revistele ISI romanesti: Proc. Rom. Acad. si An. St. Univ. Ovidius Constanta.
Editor la revista din Bulgaria: SERDICA Math. J.

Cipu Mihai - Membru în Colegiul Redacţional la *Bulletin Mathă'ematique de la Sociă'etă'e des Sciences Mathă'ematiques de Roumanie, Gazeta Matematică Seria A*.

Cojocaru Alina-Carmen - International Journal of Number Theory

Coltoiu Mihnea - Acta Universitatis Apulensis (Univ. Alba Iulia) si Proc. Romanian Academy

Constantinescu Adrian - "Acta Universitatis Apulensis",
S. Mathematics-Informatics, ISSN 1582-5329 (Editata de Universitatea "1 Decembrie 1918" din Alba Iulia. Revista B+ (CNCS), inclusa in bazele de date ale "American Math. Soc. (AMS)",
"European Math. Soc. (EMS) ". Recenzata in "Math.Reviews" si "Zentralblatt Math.")

Diaconescu Razvan - membru al comitetului editorial al seriei de carte *Studies in Universal Logic* ale editurii Springer (Basel).

Dragan Vasile - Editor asociat la International Journal on Innovative Computing, Information and Control (IJICIC).
Editor asociat la ICIC- Express Letters.

Gheondea Aurelian - Journal of Operator Theory – Fundaţia Theta, Bucureşti;
Complex Analysis and Operator Theory – Birkhäuser Verlag, Basel;
Opuscula Mathematics – AGH University of Science and Technology, Krakow;
The Open Mathematics Journal, Bentham Science Publishers, Shiraz.

Ghergu Marius - Membru în Colectivul Editorial al *ISRN Mathematical Analysis Journal* şi *Advances in Nonlinear Analysis*.

Gologan Radu - Gazeta Matematica seria A,
Bulletin Mathematique de la Societe Roumaine de Mathematiques.

Ionescu Paltin - Membru in comitetul editorial al revistei Annals of the University of Bucharest (Mathematical Series)

Iordanescu Radu - Sunt recenzent (de mai multe decenii) la Math. Rev. si la Zbl. Math., iar in ultimul timp am fost solicitat sa fac multe recenzii.

Mihailescu Eugen - In anul 2011 am devenit membru in Editorial Board la jurnalul american **Discrete and Continuous Dynamical Systems-S**.

Nichita Felix Florin - Axioms (ISSN 2075-1680) – member of the editorial board (2011-2013).

Nastasescu Constantin - Sunt membru în colectivele editoriale ale următoarelor reviste:

- Analele Universităţii din Bucureşti, Seria Matematică.
- Revue Roumaine de Mathématiques Pures et Appliquées.
- Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie.
- Analele Ştiinţifice ale Universităţii "Ovidius" din Constanţa, Seria Matematică.
- Analele Universităţii din Craiova, Seria Matematică - Informatică.
- Mathematica (Cluj).

Ornea Liviu - Bulletin Math. SSMR, Annals of the University of Bucharest

Pascu Mihai - editor al seriei Mathematics-Physics-Informatics, Petroleum-Gas University of Ploiesti Bulletin

Polisevschi Dan - Comitetul Stiintific al celei de a 33-a editie a Conferintei "Caius Iacob" de Mecanica Fluidelor si aplicatiile ei tehnice, Bucureşti, 29-30.09.2011, www.incas.ro

Popa Nicolae

1. Journal of Function Spaces and Applications, New Delhi, India, ISI impact factor 0,702.
2. Revue Roumaine Mathematiques Pures et Appliquees
3. Proceedings of Romanian Academy (Mathematics)

Popescu Calin - Editor la Gazeta Matematică — Seria A.

Popescu Dorin - Sunt editor la Central European Math. J. (jurnal Springer), la Bulletin Math. Soc. Sc. Math. Roum. si la Analele Universitatii Ovidius din Constanta

Popescu Ionel - Proceedings of the EU - NCG 4th Annual Meeting Bucharest, Romania, April 25 - 30, 2011.

Radulescu Vicentiu

1. Acquisition Editor, *de Gruyter–Versita Book Publishing Program in Mathematics*

2. Editor in Chief of *Advances in Nonlinear Analysis* (Walter de Gruyter)
3. Associate Editor of *Nonlinear Analysis: Theory, Methods & Applications* (Elsevier)
4. Associate Editor of the *Journal of Mathematical Analysis and Applications* (Elsevier)
5. Editor of *Advances in Pure and Applied Mathematics* (Walter de Gruyter)
6. Member of the Editorial Board of *Complex Variables and Elliptic Equations* (Taylor & Francis)
7. Associate Editor of *Boundary Value Problems* (Springer)
8. Associate Editor of the *Electronic Journal of Differential Equations*
9. Associate Editor of the *Bulletin of Mathematical Analysis and Applications*
10. Member of the Editorial Board of *Ann. St. Univ. Ovidius Constanta*
11. Managing Editor of *Annals of the University of Craiova - Mathematics and Computer Science Series*
12. Member of the Editorial Board of *Publications of the Centre for Nonlinear Analysis and its Applications*

Stanica Pantelimon - *European Journal of Pure and Applied Mathematics* (Associate Editor 2007–present)

Tiba Dan - Mathematical Reports, Academia Romana, Bucharest; Mathematics and its Applications, AOSR, Bucharest; Recreatii Matematice, Iasi

Timofte Vlad - Editor asociat, Australian Journal of Mathematical Analysis and Applications (AJMAA).

Timotin Dan - Membru în boardul editorial lărgit la Journal of Operator Theory.

Zamfirescu Tudor - **Bull. Math. Soc. Sci. Math. Roumanie, Carpath. J. Math., An. Univ. Craiova – Ser. Mat., An. Univ. Vest Timisoara – Ser. Mat.**

8.5 Organizari de conferinte

Aprodu Marian - French-Romanian Workshop on Complex Geometry Bucharest, Romania, July 6 - 10, 2011
http://web.me.com/aprodu/LEA-CG2011/Welcome.html

Beznea Lucian - The Seventh Congress of Romanian Mathematicians, Brasov, 29 iunie- 5 iulie 2011,
http://imar.ro/organization/activities/standalone/congmatro2011/conf.php

Brinzanescu Vasile - 7th Congress of Romanian Mathematicians, Brasov, June 29- July 05, 2011
www.imar.ro

Cojocaru Alina-Carmen - Octombrie 2011, co-organizator (cu Michael Zieve, Universitatea Michigan, SUA) a Sesiunii de Teoria Numerelor in cadrul conferintei *Central Section Meeting of the American Mathematical Society*, Nebraska-Lincoln, SUA
$http://www.ams.org/meetings/sectional/2185_program_s17.html\#title$

Coltoiu Mihnea - Comemorare Constantin Banica, Inst. S. Stoilow, 25 noiembrie 2011
http://www.imar.ro

Constantinescu Adrian

1. "The 7-th International Conference on Theory and Applications in Mathematics and Informatics (ICTAMI 2011)" - Algebra; Geometry and Topology, Alba Iulia, July 21 - 24, 2011,
   http://www.uab.ro/ictami/
   http://www.euro-math-soc.eu/node/954
   site:www.ams.org meetings calendar 2011 jul 21 alba iulia

2. "The 19-th International Conference on Applied and Industrial Mathematics (CAIM 2011)" - Algebra and Logic; Topology and Differential Geometry, Iassy, September 22 - 25, 2011,
   http://www.univagro-iasi.ro/caim2011/
   site:www.ams.org meetings calendar 2011 sep 22 iasi
   http://atlas-conferences.com/cgi-bin/calendar/d/faep68

3. "The 5-th International Conference of Differential Geometry and Dynamical Systems (DGDS-2011)", Bucharest, October 6-9, 2011 .
   http://www.mathem.pub.ro/dept/dgds-11/DGDS-11.htm

Diaconescu Razvan - *Second Romanian-Japanese Algebraic Specification Workshop*, Sinaia, Romania, 1-4 Martie 2011. `http://www.imar.ro/~diacon/rj2.html`

Ghergu Marius - UCD-TCD Undergraduate Summer School, Dublin, 28 May-3 June 2010.

Gologan Radu - Congresul Matematicienilor Romani, Braşov, iunie, 2011.

Ignat Liviu

1. Workshop for Young Researchers in Mathematics, Constanta, 12-13/05/2011,
   http://math.univ-ovidius.ro/workshop/2011/WYRM/GeneralInfo.htm

2. open session on "Waves in networks" chaired by L. Ignat and G. Leugering, Workshop on Partial differential equations, optimal design and numerics, Benasque, Spain, 2011, Aug 28 – Sep 09

Ichim Bogdan - Scoala nationala de algebra 2011, Bucuresti, 18-24 Septembrie,
http://math.univ-ovidius.ro/sna/edition.aspx?itemID=5

Iordanescu Radu - Am fost principalul organizator al WORKSHOP-ului de la Constanta (august 2011) "The 10th International Workshop on Differential Geometry and its Applications" Ovidius University, Constanta, August 26-30, 2011
http://math.univ-ovidius.ro/workshop/2011/DGA10/

Maxim Laurentiu - International Conference on Singularity Theory and Applications, Hefei, China, July 25-31, 2011.
http://www.math.wisc.edu/∼maxim/conf/Hefei/Hefei.html

Moroianu Sergiu - 10th International Workshop on Differential Geometry and its Applications,
http://math.univ-ovidius.ro/workshop/2011/DGA10/

Nenciu Irina - Membru al Advisory Committee pentru conferinţa NSF-CBMS "Global Harmonic Analysis", University of Kentucky, Lexington, KY, Iunie 2011,
http://math.as.uky.edu/cbms

Nichita Felix Florin - MedDecSup 2011, International Workshop on Next Generation Intelligent Medical Decision Support Systems, Targu Mures, September 18–19, 2011,
http://ncscs.upm.ro/

Ornea Liviu

1. Congresul Matematicienilor Romani, Brasov, 29.06-5.07, coorganizator Sectia 1.
   http://imar.ro/organization/activities/standalone/congmatro2011/conf.php

2. French-Romanian Workshop on Complex Geometry, Bucuresti, IMAR, 7–9 iulie, coorganizator.
   http://web.me.com/aprodu/LEA-CG2011/Welcome.html

3. Geometric structures on complex manifolds, Moscova, Steklov Inst., 3–7 octombrie, coorganizator.
   http://bogomolov-lab.ru/GS/

Paunescu Liviu - EU - NCG 4th Annual Meeting , Bucharest, April 25 - 30, 2011,
http://www.imar.ro/ purice/conferences/2011/EUNCG4.html

Popescu Dorin - Combinatorics in Commutative Algebra, Bucuresti, 19-23 Septembrie, 2011

Popescu Ionel - Bucuresti, Mai 23-24, 2011
A Mini-Conference on Probability and Related Fields:
http://www.imar.ro/ purice/conferences/2011/ProbAndRelated.pdf

Purice Radu

1. A 4-a Conferinta Anuala a Retelei Europene de Geometrie Necomutativa, Bucuresti, 25 - 30 Aprilie 2011
   http://www.imar.ro/ purice/conferences/2011/EUNCG4.html

2. Al 7-lea Congres al Matematicienilor Romani, Brasov, 29 Iunie - 5 Iulie 2011
   http://imar.ro/organization/activities/standalone/congmatro2011/conf.php

3. Prima Conferinta Internationala a Proiectului CERBUN (POSDRU/89/1.5/S/62988), Bucuresti, 7 - 8 Octombrie 2011
   http://www.imar.ro/ purice/Inst/2011/anunt-web.pdf

Radulescu Vicentiu

1. Seventh Congress of Romanian Mathematicians, Brasov, June 29 - July 5, 2011, `http://imar.ro/organization/activities/standalone/congmatro2011/conf.php`

2. New Trends in Modern Analysis: Probabilistic and Analytic Methods in PDEs and Spectral Theory, Hammamet (Tunisia), November 20-24, 2011, `http://www.imar.ro/organization/activities/standalone/conf-Tunisia/conf.php`

3. Workshop on Nonlinear Partial Differential Equations on the occasion of the sixtieth birthday of Patrizia Pucci, Perugia, 28 May - 1 June 2012 `http://www.dmi.unipg.it/pucci2012`

Stanica Pantelimon - Co-Editor for the Proceedings of International Conference on Fibonacci Numbers, Morelia, Mexico, July 2010;
http://faculty.nps.edu/pstanica/F14/fourteenth.html.

Stavre Ruxandra - Am făcut parte din Comitetul ştiinţific al Conferinţei "The 33rd Caius Iacob Conference on Fluid Mechanics and its Technical Applications", Bucharest, 29-30 September, 2011,
www.incas.ro

Tiba Dan

1. Computational Analysis, Jyvaskyla, iunie 2011

2. IFIP 2011, Berlin, sept.2011, Organizare minisimpozion impreuna cu Murea Cornel, Mulhouse

Torok Andrei - *Texas Ergodic Theory Workshop*, University of Houston, 22-22 martie 2011 http://www.math.uh.edu/ torok/dynamics2011/

Vuza Dan Tudor - 2011 IEEE 17th International Symposium for Design and Technology in Electronic Packaging SIITME, Timisoara, 20 octombrie 2011 – 23 octombrie 2011, www.siitme.ro. Membru in comitetul stiintific al conferintei.

8.6 Altele

Cipu Mihai

1. Membru în Colegiul pentru Învăţământul Superior şi Proiecte Ştiinţifice al Societăţii de Ştiinţe Matematice din România

2. Referent la *Bull. Math. Soc. Sci. Math. de la Roumanie, An. Şt. Univ. ,,Ovidius" Constanţa, Computers and Mathematics with Applications, Mathematical Communications, Carpathian Math. J., Monatshefte für Mathematik*

3. Responsabil cu recenziile la *Revue Roumaine de Mathă'ematiques Pures et Appliquă'ees*

4. Tutor al unui student la SNSB, în present masterand la Universitatea Cambridge

5. Membru în Comitetul de selecţie a problemelor şi coordonator la South Eastern European Mathematical Olympiad for University Students 2011

6. Membru în Comitetul de organizare a Olimpiadei naţionale de matematică

7. Coordonator la ediţia 2011 a Balcaniadei de matematică

Calinescu Corina - In prezent sunt postdoc la universitatea Yale.

David Liana

1. Am recenzat lucrari de geometrie diferentiala pentru Geometria Dedicata si Analele Universitii din Constanta.

2. Fac parte din comisia nationala CNATDCU de recunoastere a titlurilor stiintifice (de doctor, conferentiar, profesor etc) obtinute in tara sau in strainatate.

Ionescu-Kruse Delia - In perioada 15 - 31 mai 2011, am participat la programul: *Nonlinear water waves*, organizat la **Erwin Schroedinger International Institute for Mathematical Physics (ESI), Viena, Austria**.

Radulescu Vicentiu - In cadrul Scolii Normale Superioare din Bucureşti am prezentat cursul "Analiză funcţională aplicată şi ecuaţii cu derivate parţiale" (48 ore, Februarie – Iunie 2011)

Vajaitu Marian

- Membru al consiliului stiintific al IMAR.
- Am participat la conferintele IMAR.
- Am fost referent pentru o serie de lucrari trimise spre publicare la revistele: Communications in Algebra, Proc. Romanian Academy, Analele Universitatii din Bucuresti etc.

8.6.1 Conferinte sustinute

Albu Toma

1. Expunerea: *SSMR: ieri, azi, maine - ganduri personale*, Centenarul SSMR, Bucuresti, 20 noiembrie 2010.

2. Expunerea: *Rationalitatea sumelor de radicali*, Sesiunea internationala de Comunicari stiintifice "Matematica de Ieri si de Azi", Editia a XV-a, Colegiul Tehnic "Traian", Bucuresti, 26 martie 2011.

3. Expunerea: *Tezaur folcloric (II): Zece grupuri numerice familiare si izomorfismele dintre ele*, Sesiunea de Comunicari Metodico-Stiintifice a Profesorilor de Matematica din judetul Prahova, editia a XXXVII-a, Sinaia, 29 mai 2011.

4. Expunerea: *From Galois and Kummer Theory to a gentle introduction into Cogalois Theory*, The Seventh Congress of Romanian Mathematicians, Brasov, 29 June - 5 July 2011.

5. Expunerea: *A gentle introduction into Cogalois Theory*, Colloquium Talk, Dong-A University, Busan, South Korea, 21 June 2011

6. Expunerea: *The Osofsky-Smith Theorem for modular lattices, and applications*, Plenary Talk, The Sixth China - Korea - Japan International Conference on Ring and Module Theory, 27 June - 2 July 2011, Kyung Hee University, Suwon, South Korea.

7. Expunerea: *The Hopkins-Levitzki Theorem: old and new (I)*, Colloquium Talk, Memorial University of Newfoundland, St. John's, Canada, 23 September 2011.

8. Expunerea: *The Hopkins-Levitzki Theorem: old and new (II)*, Algebra Seminar Talk, The Atlantic Algebra Canter, Memorial University of Newfoundland, St. John's, Canada, 28 September 2011.

9. Expunerea: *De la o inspectie de gradul I cu Laurentiu Panaitopol la extinderi minimale de inele*, Centrul de Documentare si Informare ,,Laurentiu Panaitopol", Colegiul National ,,Spiru Haret", Bucuresti, 7 noiembrie 2011.

10. Expunerea: *O introducere elementara in Teoria Galois si Teoria Cogalois*, Simpozionul Galois 200, Valenii de Munte, 19 noiembrie 2011.

Badea Lori - *Multigrid method with constraint level decomposition for some quasi-variational inequalities*, **25-th IFIP TC7 Conference on System Modeling and Optimization**, 12-16 septembrie, 2011, Berlin, Germania.
-*Multigrid methods for constrained minimization problems*, **The Seventh Congress of Romanian Mathematicians**, 7-9 Iulie, 2011, Brasov, Romania.

Anton Marian

1. Mathematics Colloquium, Ripon College, WI, Nov , 2011

2. Math for Everyone, Notre Dame, IN, Sep 15, 2011

3. Congress of Romanian Mathematicians, Brasov, RO, June 30, 2011

4. Mathematics Colloquium, Southern Connecticut State University, CT, Feb 25, 2011

5. Pedagogy Luncheon, Centre College, KY, Feb 24, 2011

6. Mathematics Colloquium, Saint Mary's College, IN, Feb 24, 2011

Baditoiu Gabriel

1. "Geometria submersiilor Riemann", Universitatea Bucuresti, 6 Mai 2011, in cadrul colocviului de geometrie: Un an de la disparitia profesorului Stere Ianus

2. "Lax pair equations and Connes-Kreimer renormalization", University of Potsdam, 29 Septembrie 2011, in cadrul workshop-ului "Analysis, Geometry and Quantum Physics" in onoarea sarbatoririi a 60 de ani de la nasterea Profesorului Steven Rosenberg.

Barcanescu Serban

1. 7-9 iulie 2011-participare la Workshop-ul Romano-Francez de Geometrie Complexa (IMAR)

2. 29 iunie-05 iulie 2011-participare la Congresul Matematicienilor Romani(Brasov)

3. 19-24 Septembrie 2011-participare la Scoala Nationala de Algebra (Bucuresti-IMAR)

Belinschi T. Serban - In 2011 am participat la mai multe conferinte si seminarii. La patru dintre ele am prezentat rezultate obtinute singur sau in colaborare cu mai multi autori:

1. Serban Belinschi, 2011. Central limits in non-commutative probability. 50 minutes talk in the Wabash Miniconference, IUPUI, 25 September 2011, Indianapolis, IN, USA.

2. Serban Belinschi, 2011. Towards L^∞-estimates for densities of free convolutions. 50 minutes talk in the probability seminar of the Institute of Mathematics of Université de Toulouse Paul Sabatier, July 4, 2011, Toulouse, France.

3. Serban Belinschi, 2011. Convolution semigroups in operator-valued probability. 25 minutes talk in the Operator Algebras Session of the CMS Summer Meeting, June 4, 2011. Edmonton, AB, Canada.

4. Serban Belinschi, 2011. Convolution semigroups for operator-valued distributions. 50 minutes talk at the Bialgebras in Free Probability Programme, Erwin Schrödinger Institute, April 18, 2011, Vienna, Austria.

Beltita Daniel

- Daniel Beltiţă a susţinut o expunere cu titlul *Noncommutative function spaces and Toeplitz operators* pe 8.06.2011 la Institutul de Matematică al Universităţii din Białystok, Polonia.

Beltita Ingrid

- În perioada 3–5 mai 2011, Ingrid Beltiţă a susţinut o mini-serie de 4 cursuri cu titlul *Local smoothing for the backscattering transform* în cadrul trimestrului special de probleme inverse "Theoretical and Numerical Aspects of Inverse Problems and Scattering Theory" (4 Aprilie- 8 iulie 2011) organizat la Instituto de Ciencia Matemáticas (Madrid).

Berceanu Barbu "*Simple braids*" sustinuta la 5th World Conference on 21st Century Mathematics, Abdus Salam School of Mathematical Sciences (ASSMS), februarie 2011.

As adauga alte doua conferinte anulate de circumstante nefavorabile: "*Koszul duality for Grobner bases",* Abbottabad, mai 2011, "*Braiduri simple*", Brasov, iunie 2011, si, de asemenea, "*Les espaces des configurations des varietes projectives*", care a fost pe lista de optiuni la Conferinta franco-romana, Bucuresti, iulie 2011.

Beznea Lucian
Korean Mathematical Society Spring Meeting, April, 2011, Seoul, South Korea, invited speaker
Seoul National University, May, 2011
CRM Montreal, Gauthier-Gowri Fest Conference, June, 2011, invited speaker
IGK-Workshop, Bielefeld, July, 2011, invited speaker
Probability Seminar, Univ. of California at San Diego, USA, September, 2011
Probability Seminar, Purdue University, USA, September, 2011
Mathematics - Colloquium, Worcester Polytechnic Institute, USA, September, 2011
Stochastic Analysis Seminar, Oxford-Man Institute, University of Oxford, October, 2011
Stochastic Analysis Seminar, Imperial College, London, October, 2011
Probabilités et Statistiques, Univ. Orsay, France, November, 2011.

Boca Florin-Petre - *Irregularities in the angular distribution of hyperbolic lattice points*, Seventh Congress of Romanian Mathematicians, Braşov, Romania, June 29 -July 5, 2011.

Bonciocat Anca Iuliana - participare la conferinţa internaţională "Functional inequalities and discrete spaces", Marne-la-Vallèe, Franţa, 11 – 14 ianuarie 2011, cu comunicarea *Curvature bounds: discrete versus continuous spaces.*
- participare la conferinţa internaţională "Workshop for Young Researchers in Mathematics", Universitatea Ovidius din Constanţa, 12 – 13 mai 2011, cu comunicarea *Functional inequalities in discrete spaces.*
- participare la conferinţa internaţională "The Seventh Congress of Romanian Mathematicians", 29 iunie - 5 iulie 2011, Brasov, Romania, cu comunicarea *Curvature bounds and functional inequalities in discrete spaces.*
- participare la "A XV-a Conferinţă Anuală a Societăţii de Ştiinţe Matematice din România", 29 septembrie - 2 octombrie 2011, Hunedoara, Romania, cu conferinţa plenara *Asupra geometriei spatiilor metrice.*
- participare la conferinţa internaţională "Croissance économique et soutenabilité sociale. Défis et perspectives européennes", 7 - 8 octombrie 2011, Bucureşti, cu comunicarea *Weak transportation cost inequalities on metric measure spaces.* Această întâlnire de dezbateri a avut loc în cadrul proiectului "Cercetarea ştiinţifică economică, suport al bunăstării şi dezvoltării umane în context european - CerBun, ID: 62988.

Bonciocat Nicolae Ciprian
- N.C. Bonciocat, *Using prime numbers to construct irreducible polynomials*, conferinta sustinuta in cadrul celui de-al 7-lea Congres al Matematicienilor Romani, 29.06.2011–05.07.2011, Brasov, Romania.
- N.C. Bonciocat, *Irreducibility results for linear combinations of relatively prime polynomials*, expunere sustinuta in cadrul seminarului de Teoria Numerelor, Univ. Strasbourg, 29.08.2011.

Brinzanescu Vasile - In februarie 2011 am sustinut (ca invitat)conferinta cu tema: Generalized complex structures, la Conferinta Internationala de Geometrie nekahleriana de la Luminy, Franta. In martie 2011 am sustinut (ca invitat) conferinta cu tema: Vector bundles on non-Kahler Calabi-Yau type 3-folds, la Conferinta Internationala "Instantons", de la Moscova, Rusia. In iulie 2011 am tinut (ca invitat) o conferinta cu tema: Moduli spaces of vector bundles on elliptic bundles, la Conferinta Internationala French-Romanian Workshop on Complex Geometry, IMAR, Bucharest, July- 7-9, 2011. In lunile mai-iunie 2011 (2 luni) am fost profesor invitat la ICTP Trieste Italia si am tinut mai multe conferinte invitate la: ICTP Trieste, SISSA Trieste, Univ. Bologna, Univ. Firenze, Univ. Potenza.

Buliga Marius - Cursul "Carnot-Carathéodory spaces as metric spaces with dilations" în cadrul "Summer School in Non-Linear Analysis" -Rio de Janeiro, ianuarie 2011. La această şcoală de vară au mai ţinut cursuri Bernard Dacorogna (EPFL), Wilfrid Gangbo (Georgia Tech).

Burciu Sebastian

- *"On the kernels of the representations of semisimple Hopf algebras",*
  Quantum theory and symmetries 7, Prague, 13-17 August, 2011.
- *"On Cliford theory for semisimple Hopf algebras",*
  Hopf algebras and tensor categories, Almeria (Spain), July 4-8, 2011.

- *"Clifford theory for semisimple Hopf algebras"*
  June 29 - July 5, 2011, Brasov, Romania.

Capatina Anca

- On the asymtotic behavior of a Signorini problem in a perforated domain (50 min., lucrare în colaborare cu H. Ene şi C. Timofte), The 7-th Congress of Romanian Mathematicians, June 29-July 5, 2011, Universitatea Braşov, România
- Homogenization results for elliptic problems in periodically perforated domains with mixed-type boundary conditions (90 min., lucrare în colaborare cu H. Ene şi C. Timofte), Symposium "Homogenization and Multi scale Analysis" joint between INS and IFMA, October 3-7, 2011, Fudan University, China

Cheptea Dorin

1. *Weight systems and finite-type invariants of 3-dimensional manifolds*, The 7th Congress of Romanian Mathematicians June 29th - July 5th, 2011, Brasov, Romania
2. *Applications of the Jacobi-digrammatic formulation of Johnson-Morita homomorphisms*, MITRE-2011 Conference August 22nd, 2011, Chisinau, Moldova
3. *Weight systems and finite-type invariants of 3-dimensional manifolds*, Uppsala, Suedia, November 2011 (va avea loc)
4. (titlul exact va fi precizat) Aarhus, Danemarca, November-December 2011 (va avea loc)

Chiose Ionut - Prezentare la *The Seventh Congress of Romanian Mathematicians*

Cimpoeas Mircea - Am participat la "The Seventh Congress of Romanian Mathematicians", Braşov, România, 29 iunie-5 iulie, unde am sustinut o expunere cu titlul "A note on Stanley conjecture for monomial ideals".

Cipu Mihai - La cel de al şaptelea Congres al Matematicienilor Români am prezentat conferinţa cu titlul „Bounds for integer D(-1)-quadruples".

Cobeli Cristian - *Excursion in Pascal Triangle,* The Seventh Congress of Romanian Mathematicians, June 29–July 5, 2011, Braşov, Romania.

Cojocaru Alina-Carmen

- Noiembrie 2011, *Workshop on Women in Numbers*, Banff International Research Station, AB, Canada; **conducator proiect cercetare** cu Alice Silverberg
- Octombrie 2011, *Number Theory Workshop*, University of California at Irvine, CA, SUA
- Octombrie 2011, *Central Section Meeting of the American Mathematical Society*, University of Nebraska-Lincoln, NE, SUA; **adresa plenara**
- Iulie 2011, *The 7th Congress of Romanian Mathematicians*, Brasov, Romania
- Iunie-Iulie 2011, *27th Journees Arithmetiques*, Vilnius, Lithuania; **adresa plenara**

- Iunie 2011, *Workshop on the Arithmetic of Function Fields*, Imperial College, London, UK

- Aprilie 2011, *Workshop on Arithmetic Statistics*, Mathematical Sciences Research Institute, Berkeley, California, SUA

- Ianuarie 2011, *Connections for Women: Arithmetic Statistics*, Mathematical Sciences Research Institute, Berkeley, California, SUA

Constantinescu Adrian

1. Graded subalgebras: Algebra, Topology, Geometry.I (Dedicated to the memory of Professor Nicolae Radu), conferinta in sectie (" 35 min. invited parallel section lecture") la "7-th International Conference on Theory and Applications in Mathematics and Informatics (ICTAMI 2011)" - Algebra; Topology and Geometry, Alba Iulia, July 21-24, 2011.

2. Hilbert 14-th Problem and subalgebras: an introduction, conferinta plenara ("45 min. plenary lecture" suplimentara) la "7-th International Conference on Theory and Applications in Mathematics and Informatics (ICTAMI 2011)", Alba Iulia, July 21-24, 2011.

3. Graded subalgebras: Algebra, Topology, Geometry.II, (Dedicated to the memory of Professor Nicolae Radu (1931-2001)), conferinta plenara ("45 min. invited plenary lecture") la "19-th International Conference on Applied and Industrial Mathematics (CAIM 2011)", Iassy, September 22-25, 2011.

4. Topological properties of morphisms of schemes over a field and the descent of the algebraicity, lectie in sectie ("30 min. keynote lecture") la "5-th International Conference of Differential Geometry and Dynamical Systems (DGDS-2011)", Bucharest, October 6-9, 2011.

5. Topological conditions of finite generation of subalgebras and Hilbert-Mumford-Nagata Theorem on the subrings of invariants.II: the case of an arbitrary base field, conferinta in "Mathematics and Computer Science Program" (" 45 min. invited talk") la "International Conference on Sciences" - Mathematics - Algebra and Applications (cofinanced from the European Social Found, through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/CPP 107/DMI 1.5/S/77082/2010 - managed by the Romanian Academy), Oradea, November 11-12, 2011.

   Nota: Rezumatele acestor talk'uri, continand principalele rezultate prezentate, au aparut in actele Conferintelor.

   Extras dintr-o scrisoare recenta din partea unei reviste :

   .....

   Dear Adrian Constantinescu,

   This is Journal of Mathematics and System Science (ISSN 2159-5291, USA).

   We are glad to know you have submitted a paper named " Graded subalgebras: Algebra, Topology, Geometry. II. Dedicated to the memory of Professor Nicolae RADU

(1931-2001))" in The 19th Edition of the Annual Conference on Applied and Industrial Mathematics, September 22-25, 2011, Romania. We are very interested in your research, if the paper mentioned has not been published in other journals ...

.....

David Liana - Am sustinut o expunere la Congresul Matematicienilor Romani de la Brasov (iulie 2011), cu titlul: Dubrovin's duality for F-manifolds with eventual identities.

Diaconescu Razvan - *Guidelines for Formal Specification and Verification*, Second Romanian - Japanese Algebraic Specification Workshop, Sinaia, Romania, Martie 2011.

Dinu Florin Liviu

1. *Shock wave − sound turbulence interaction*, 3rd Congress of Applied Mathematics [3rd MACI 2011], 9−11 Mai 2011, Universitatea Nationala a Sudului, Bahia Blanca, Argentina

2. *Nonlinearized Fourier approach and coherence. Applications to shock − sound turbulence interaction*, International Conference on Applied Mathematics, Modeling and Computational Science (AMMCS 2011, a Laurier Centennial Conference), 25−29 Iulie 2011, Universitatea Wilfrid Laurier, Waterloo, Ontario, Canada

3. *Wave-wave interactions of a gasdynamic type: a comparison between two approaches − regular vs. irregular*, International Conference on Applied Mathematics, Modeling and Computational Science (AMMCS 2011, a Laurier Centennial Conference), 25−29 Iulie 2011, Universitatea Wilfrid Laurier, Waterloo, Ontario, Canada

4. *Wave-wave regular interactions of a gasdynamic type: importance of quantifying an "amount" of genuine nonlinearity*, plenara, A 33-a Conferinta Anuala de Mecanica Fluidelor "Caius Iacob", 29−30 Septembrie 2011, Bucuresti

5. *Wave-wave regular interactions of a gasdynamic type: a parallel between two contexts − isentropic vs. anisentropic*, Joint Congress of SAMS [South African Math. Soc.] and AMS, 29 Noiembrie − 3 Decembrie 2011, Universitatea Metropolitana Nelson Mandela, Port Elizabeth, Africa de Sud

Ene Horia - La Workshopul "Homogenization and Asymptotic Analysis" organizat intre 3-7 octombrie 2011 la Shanghai, China, am sustinut conferinta "Homogenization results for elliptic problems in periodically perforated domains with mixed-type boundary conditions"

Enescu Florian - (November 2011), A finiteness condition on local cohomology modules, Commutative Algebra and Algebraic Geometry at Urbana-Champaign Conference, University of Illinois.

Faciu Cristian - *On the structure of shock layers and phase boundaries for a rate-type approach to solid-solid phase transitions* in cadrul 7^{th} Congress of Romanian Mathematicians, June 29 - July 5, 2011

Gaba Radu - Am prezentat articolul "A mathematical model and computation program of the chamber furnace of boilers for air pollution reduction", la "6^{th} International Conference on

Environmental Engineering and Management (Mathematical Modeling, Simulation and Optimization Section)", jointly organized by "Gheorghe Asachi" Technical University of Iasi and University of Pannonia, Veszprém, Balatonalmadi, Hungary, 1-4 September 2011.

Gologan Radu - Conferinţa Anuală a SSMR, Hunedoara, 29-30 septembrie: Asupra relaţiei continuu-discret în studiul unor şiruri.

Ichim Bogdan

1. International conference on Matrix Methods in Mathematics and Applications, Moscow, Russia, 22 – 25 June 2010.
   Am tinut o prezentare cu titlul *Introduction to Normaliz 2.7.*

2. Congresul Matematicienilor Romani, Brasov, 29 Iunie – 5 Iulie,
   Am tinut o prezentare cu titlul *Introduction to Normaliz 2.7.*

3. Scoala nationala de algebra 2011, Bucuresti, 18-24 Septembrie,
   Am tinut trei prezentari cu titlurile *Hilbert functions and Ehrhart functions I, Hilbert functions and Ehrhart functions II, The Normaliz algorithms.*

Ignat Liviu - Au fost sustinute conferinte la

1. Instituto de Matematica, Universidade Federal do Rio de Janeiro

2. IMPA, Rio de Janeiro

3. Workshop for Young Researchers in Mathematics, Constanta

4. Congresul matematicienilor romani, Brasov

5. Facultatea de stiinte, Universitatea din Galati

6. Workshop on Partial differential equations, optimal design and numerics, Benasque, Spain, 2011, Aug 28 – Sep 09

Ionescu-Kruse Delia - Elliptic and hyperelliptic functions describing the particle motion beneath small-amplitude water waves with constant vorticity, 26 Mai 2011 - *ESI, Viena, Austria.*

Ionescu Paltin - Am fost vorbitor invitat la urmatoarele manifestari stiintifice:

1. Algebraic Geometry at NIMS (Daejeon, Corea) martie 2011

2. Algebraic Geometry at KIAS (Seul, Corea) aprilie 2011

3. Colocviul romano-francez de geometrie algebrica, IMAR, iulie 2011

Alte conferinte:

1. Congresul Matematicienilor Romani, Brasov, iunie 2011

2. Univ. Nancy, mai 2011

3. Univ. Complutense, Madrid, iunie 2011

4. Univ. Ferrara, sept. 2011

Ionescu Paul Cristodor
A special class of morphisms in positive characteristic - André Memorial Conference - EPFL Lausanne 11-13 Mai 2011(invited speaker);
Commutative Algebra: interactions with Combinatorics and Graph Theory - The 5th International Conference on Research and Education in Mathematics (ICREM5) ITB Bandung, 20-22 Octombrie 2011(plenary speaker);
Algebraic invariants of commutative rings with geometric applications - ciclu de 5 lectii tinut in cadrul International School on Computational Commutative Algebra and Algebraic Geometry, Villa Pace, Messina, 17-29 Octombrie 2011.

Joita Cezar • *On the disk property of coverings of 1-convex surfaces*, The Seventh Congress of Romanian Mathematicians, Brasov, 29 iunie - 5 iulie, 2011
• *Analytic convexity via lower dimensional objects* The 10th International Workshop on Differential Geometry and its Applications Ovidius University, Constanţa, 26 - 30 august, 2011
• *Coverings of a link singularity and q-convexity*, Seminarul de Singularitati si Aplicatii, Universitatea Lille 1, Franta, 21 septembrie 2011
• *On coverings of 1-convex surfaces*, Seminarul de Analiza Geometrica, Universitatea Lille 1, Franta, 23 septembrie 2011

Leustean Laurentiu - *Recent developments in proof mining*, Workshop 1145: Mathematical Logic: Proof Theory, Constructive Mathematics, Nov 6 - Nov 12, 2011, Mathematisches Forschungsinstitut Oberwolfach (invited talk).

Maican Mario

1. *Moduli of Plane Sheaves Supported on Curves of Low Multiplicity*, Contributed talk, Moduli Spaces–Closing Conference, Isaac Newton Institute for Mathematical Sciences, Cambridge University, 28.06.2011

2. *Semi-stable Plane Sheaves of Dimension One and Low Multiplicity*, Invited talk, The Seventh Congress of Romanian Mathematicians, University of Transilvania, Braşov, 05.07.2011

3. *On some moduli spaces of sheaves supported on plane curves*, Invited talk, General Mathematics Seminar of the University of Luxembourg in cooperation with the Luxembourg Mathematical Society, 22.11.2011

Matei Daniel - In luna aprilie am participat la intalnirea A.M.S. de la Worcester, MA, SUA, unde am sustinut conferinta "Characteristic varieties of quasiprojective manifolds and orbifolds".

In luna mai am sustinut o serie de conferinte la Universitate din Pau, Franta, cu titlul "Multidimensional queueing networks and multivariate residues".

In perioada 29 iulie - 5 iulie am participat la Congresul Matematicienilor Romani, la Brasov, unde am sustinut conferinta "Characteristic varieties of quasiprojective manifolds and orbifolds".

Macinic Anca - Am sustinut expunerea cu titlul la conferinta "Workshop for Young Researchers in Mathematics", Univ. Ovidius Constanta, 12-13 mai 2011.

Mihailescu Eugen - International Program Conference Cerbun, Oct. 7-8, 2011.

Moroianu Sergiu

1. Analysis, Geometry and Surfaces, Autrans, martie 2011;
2. Microlocal Methods in Analysis and Geometry, Tubingen, iunie 2011;
3. CAIM 2011, Iasi, septembrie 2011.

Nastasescu Constantin

1. *A Generalization of the Gabriel-Popescu Theorem*: Universitatea din Almerìa, Spania, martie 2011.
2. *Hopf Algebras Coacting on Coalgebras*: vorbitor principal la conferinţa "Hopf Algebras and Tensor Categories", Universitatea din Almerìa, Spania, 4 – 8 iulie 2011.
3. *Nicolae Popescu – omul şi matematicianul*: la conferinţa "Mathematics & IT: Research and Education (MITRE-2011)", Chişinău, Republica Moldova, 22 – 25 august 2011, dedicată aniversării a 65-a a Universităţii de Stat din Moldova.
4. *Acţiuni şi coacţiuni în algebră*: la conferinţa organizată cu ocazia împlinirii a 100 de ani de la naşterea profesorului dr. Ion Creangă, Universitatea "Al. I. Cuza", Iaşi, 23 septembrie 2011.
5. *Lema lui Mitchell. Generalizare şi aplicaţii la teorema Gabriel-Popescu*: la "A 19-a Conferinţă de Matematici Aplicate şi Industriale (CAIM)", 22 – 25 septembrie 2011, Iaşi.
6. *Coactions on coalgebras*: Universitatea din Padova, Italia, noiembrie 2011.

Negut Andrei

1. IMAR, Iulie 2011
2. Universitatea Columbia, Septembrie 2011

Nichita Felix Florin

1. The Seventh Congress of Romanian Mathematicians, Section 1B: Algebra; Brasov, Romania, 29 June - 5 July, 2011 (50 minute).
2. A XV-a Conferinta Anuala a Societatii de Stiinte Matematice din Romania, Hunedoara, 29.09.2011 - 02.10.2011 (20 minute).
3. The Seventh International Conference Quantum Theory and Symmetries (QTS-7), Prague, Czech Republic, August 7-13, 2011 (poster).
4. The 10th International Workshop on Differential Geometry and its Applications, Ovidius University, Constanta, August 26-30, 2011 (poster; cu Bogdan P. Popovici).
5. The Energy and the Entropy of Hybrid Multi-Agent Systems, International Conference on Virtual Learning, Cluj-Napoca, 28-29 Octombrie 2011 (poster; cu Barna L. Iantovics).

Nitica Viorel - Separation results in max-plus algebra, SIAM Conference on Control and Its Applications (CT11), at the Hyatt Regency Baltimore, Baltimore, Maryland, USA, July 25-27, 2011

Ornea Liviu - Rezultate recente in geometria local conform Kaehler, Cagliari, martie 2011 (2x1 ora).

Panaite Florin

1. "Alternative twisted tensor products and Cayley algebras", in cadrul conferintei internationale "Nonassociative Algebras and Related Topics", Coimbra (Portugalia), iulie 2011

2. "Pseudosymmetric braided categories", in cadrul conferintei internationale "Algebra, Geometry and Mathematical Physics VII", Mulhouse (Franta), octombrie 2011

Pantilie Radu - On holomorphic maps and Generalized Complex Geometry, The Seventh Congress of Romanian Mathematicians, 29 iunie – 5 iulie, Braşov, România.

Papadima Stefan - In ianuarie-aprilie 2011, am continuat proiectele de cercetare comune cu co-autorul meu, Prof. Alex Suciu, in calitate de Visiting Professor la Northeastern University, SUA. In perioada 8-11 aprilie, am participat la Amer. Math. Soc. Workshop and Special Session on *The algebraic geometry and topology of hyperplane arrangements* (Boston-Worcester), cu conferinta *Germs of cohomology jump loci*.

Am prezentat conferinta *Diophantine geometry, representation theory and homology of the Johnson filtration*, la *Workshop on the topology of algebraic varieties* (Univ. de Nice, 25-27 mai 2011).

In cadrul LEA *French-Romanian workshop on complex geometry* (IMAR Bucuresti, 7-9 iulie 2011), am tinut conferinta *Arithmetic symmetry of cohomology jump loci*.

Pascu Mihai - On the structure of the elementary solution of the Laplacian on an analytic Riemannian manifold of even dimension, Universitatea Vasile Alecsandri din Bacau, 26 mai 2011

Pasol Vicentiu - Congresul International al matematicienilor romani, Brasov, 2011
ICTAMI, Alba Iulia, 2011

Pilca Mihaela Veronica - 29.08.2011, On Formal Riemannian Metrics, The 10th International Workshop on Differential Geometry and its Applications, Ovidius University, Constanta, Romania.

Polisevschi Dan - Homogenizing the Darcy/Stokes coupling, la a 33-a editie a Conferintei "Caius Iacob" de Mecanica Fluidelor si aplicatiile ei tehnice, Bucureşti, 29-30.09.2011, www.incas.ro

Popa A. Alexandru - *Modular forms and period polynomials,* conferinta in cadrul Congresului al VII-lea al matematicienilor romania, Brasov, Iulie 2011

Popa Nicolae - A class of Schur multipliers on some quasi-Banach spaces of infinite matrices - FSDONA 2011 Tabarz Germany.

Popescu Dorin
1) Some results on depth and Stanley depth la Scoala de Algebra:Combinatorics in Commutative Algebra, Bucuresti, 19-23 Septembrie, 2011 si
2) New results on Stanley depth la Congresul 7 al Matematicienilor Romani, Brasov, iulie, 2011,
3) Artin approximation (5 conferinte) la Conferinta "Algebraic versus Analytic Geometry, Noiembrie 19-26, 2011 organizate la Institutul European Erwin Schroedinger din Viena.

Popescu Ionel

1. EU - NCG 4th Annual Meeting, Bucuresti, April 26, 2011
2. Young Researchers, Constanta, Mai 13
3. A Mini-Conference on Probability and Related Fields, Mai 24, Bucuresti, 2011
4. 5th International Conference on Stochastic Analysis and its Applications September 59, 2011

Prunescu Mihai - Am sustinut conferinta "Rekurrente Doppelfolgen über endlichen Mengen" pe 18.02.2011 la Universitatea Bielefeld la invitatia grupului de cercetare "Spectral theory of aperiodic order" si pe 21.02.2011 la Freie Universität Berlin la invitatia grupului interdisciplinar "Embodied Information", in Facultatea de Filozofie a acestei universitati.

Purice Radu

1. *Decay of Eigenfunctions of Magnetic Hamiltonians*, conferinţă invitată la **Workshop on Mathematical Challenges of Quantum Transport in Nano-Optoelectronic Systems**, WIAS Berlin, 4 - 5 Februarie 2011.
2. *Structuri matematice in studiul observabilelor cuantice*, 8 Martie 2011, în cadrul Conferinţelor lunare ale Facultăţii de Matematică şi Informatică a Universităţii din Bucureşti.
3. *Quantization in a magnetic field*, conferinţă invitată la **Microlocal Methods in Mathematical Physics and Global Analysis**, Tübingen, 14 - 18 Iunie 2011.

Raicu Claudiu - SIAM Conference on Applied Algebraic Geometry, Raleigh: *Secant Varieties of Segre–Veronese Varieites.*

Ramazan Birant - Am prezentat expunerea "Problems to Open the Math Appetite of Non-Mathematicians" la 15th Annual Spring Conference of California Mathematics Council, April 30, 2011, South Lake Tahoe.

Radulescu Vicentiu

1. *Variational principles and applications to multiple solutions of PDEs*, International Conference on Nonlinear Operators, Differential Equations and Applications (ICNODEA 2011), Cluj, July 5-8, 2011
2. *Qualitative analysis of some problems in the theory of non-Newtonian fluids*, Partial Differential Equations in Mathematical Physics and their Numerical Approximation, Levico Terme, Trento, Italy, September 4-9, 2011

3. *Proprietăţi calitative ale soluţiilor unor probleme de valori proprii neliniare*, Seminarul Catedrei de Matematică, Universitatea Ovidius, Constanţa, 21 Octombrie 2011

4. *Bifurcation phenomena associated to degenerate or singular elliptic equations*, Oxford PDE Seminar, University of Oxford, November 14, 2011

Rasdeaconu Rares

1. *Relative open Gromov-Witten theory,*, Aprilie 2011, Oberwolfach Workshop, Germania, "Real enumerative questions in complex and tropical geometry", organizat de G. Mikhalkin, E. Shustin, J. Walcher, J.-Y. Welschinger;

2. *Relative open Gromov-Witten theory,* The Seventh Congress of Romanian Mathematicians, June 29 - July 5, 2011, Braşov, Romania, The Algebra, Algebraic, Complex and Differential Geometry and Topology Section.

Stavre Ruxandra - R. Stavre, Asymptotic analysis of the Stokes flow with variable viscosity in a thin elastic channel, "The 33rd Caius Iacob Conference on Fluid Mechanics and its Technical Applications", Bucharest, 29-30 September, 2011.

Tiba Dan - Univ. Jyvaskyla, Finlanda, iunie 2011; BCAM, Bilbao, Spania, mai 2011; IFIP 2011, Berlin, Germania, sept. 2011

Timotin Dan

1. Expunere despre subspaţii contractiv incluse în spaţii Nevanlinna–Pick, la al şaptelea Congres al Matematicienilor Români, Braşov, iunie 2011.

2. Expunere despre imaginea numerică a contracţiilor de clasă $C_0(N)$, la conferinţa *International Workshop on Operator Theory and its Applications*, Sevilla, iulie 2011.

Torok Andrei

- *Dynamical Systems seminar*, UT Austin, Austin, April 2011
- *International Workshop on Global Dynamics Beyond Uniform Hyperbolicity*, CIRM Marseille, June 2011
- *The Seventh Congress of Romanian Mathematicians*, Braşov, Romania, July 2011
- *Workshop on Ergodic Theory and Dynamical Systems*, Warwick, July 2011

Ursu Vasile

1. Congresul al VII-lea al Matematicienilor Romani (29 iunie-5 iulie, 2011, Brasov);

2. Conferinta Internationala Loops - 2011 (25-27 iulie, 2011, Tverst, Czech Republic);

3. Conferinta Internationala MITRE 2011 (22-25 august, 2011, Chisinau);

4. Conferinta Internationala CAIM 2011 (22-25 septembrie, 2011, Iasi).

Valusescu Ilie

1. *Some geometrical aspects of the* Γ*-correlated processes*, Congresul Matematicienilor Romani, CMR-7, Brasov, 29.06-05.07.2011.

2. *On the Friedrichs angle between the past and the future of some* Γ*-correlated processes*, International Conference on Theory and Applications of Mathematics and Informatics, ICTAMI-2011, Alba Iulia, 21-24 iulie 2011.

Vilcu Costin - Am avut prezentări la: *The Seventh Congress of Romanian Mathematicians*, 29 Iunie - 5 Iulie 2011, Brasov *The 10-th International Workshop on Differential Geometry and its Applications*, 26-30 August 2011, Constanta.

Zamfirescu Tudor - Conferinţe la Braşov (România), Mulhouse (Franţa), Shijiazhuang (R.P. China), Puerto Vallarta (Mexic), Bandung (Indonezia).

8.7 Cursuri

Albu Toma - In semestrul II al anului universitar 2010-2011 am oredat cursul master intitulat "*Topics in Galois and Cogalois Theory*" la **Scoala Normala Superioara Bucuresti**.

8.7.1 Proiecte depuse

Ambro Florin - Am propus proiectul de cercetare *Inele log canonice*, acceptat de catre CNCS - UEFISCDI (proiect PN-II-RU-TE-2011-3-0097).

Cipu Mihai - Proiect *Analyse diophantienne dans l'étude des polynômes et des équations diophantiennes* acceptat de LEA Math-Mode.

David Liana - Am depus un proiect **Structuri hermitiene si cuaternionice pe varietati diferentiabile si aplicatii**, care a iesit castigator in competitia PCE 2011.

Diaconescu Razvan

1. PN-II-ID-PCE-2011-3-0439 (Metode de logică universală pentru informatică)

2. PN-II-ID-PCCE-2011-2-0025 (Logical Methods for Security Protocol Verification: foundations and methodologies)

Gologan Radu - Biological Signals Computer Aided Diagnosis System
la
Funding Applicationnnns for Joint Applied Research Projects, PN-II-PT-PCCA-2011-3 director de proiect)

Ichim Bogdan - Am depus proiectul TE cu titlul *High-performance Algorithms and Experimental Computations Associated with Commutative Algebra and Combinatorics.*

Ignat Liviu - Proiect IDEI, PN-II-ID-PCE-2011-3-0075, competitie 2011, suma totala = 1.500.000 RON

Ionescu-Kruse Delia - PN-II-RU-TE-2011-3-0162, intitulat *Mathematical modelling of water waves: geometric and analytic aspects.*

Moroianu Sergiu - Grant CNCS TE 2012-2014 (acceptat).

Ornea Liviu - Grant CNCS castigat: Locally conformally Kaehler and related structures (se va derula prin Univ. Bucuresti).

Pantilie Radu - Geometrie cuaternionică generalizată, propunere de proiect depusă la cncs.

Polisevschi Dan - Particip la proiectul "Doctoratul in stiinte fundamentale - inceputul unei cariere de varf in cercetare", in calitate de conducator de doctorat

Popescu Ionel - CNSC PN-II-RU-TE-2011-3-0259 "Randomness, Geometric Problems and Functional Inequalities "

Rasdeaconu Rares - În noiembrie 2011, am propus proiectul cu titlul "*Real symplectic geometry: enumerative invariants and smooth topology in low dimensions*" pentru un grant NSF.

Stanica Pantelimon

- AFOSR Research Grant
- Singapore TL@NUS

Tiba Dan - Grant CNCS pe perioada 2012-2014 (obtinut)

Timofte Vlad - Proiectul *"Differentiation and implicit functions in topological vectoe spaces, and applications"*, propus in cadrul programului IDEI-PCE 2011 (nu a fost aprobat pentru finantare).

Valusescu Ilie - Proiect de grant UEFISCDI nr. PN-II-ID-PCE-2011-3-0119.

Vilcu Costin - PN-II-ID-PCE-2011-3-0592: VILCU Costin: *Contributions to the geometry of polyhedra*, 82.33 puncte, pe lista de rezervă.

Zamfirescu Tudor - grantul PN-II-ID-PCE-2011-3-0533

8.7.2 Premii

Stavre Ruxandra - În decembrie 2010 am luat Premiul "Spiru Haret" al Academiei Române.

8.7.3 Visiting

Brinzanescu Vasile - Profesor invitat in lunile mai-iunie (2 luni), 2011, la ICTP Trieste, Italia.

Matei Daniel - In perioada octombrie-decembrie am vizitat Universitatea din Zaragoza, Spania, finantat de o bursa de cercetare a guvernului provinciei Aragon.

Moroianu Sergiu

1. Profesor Invitat CNRS la Ecole Polytechnique, Franta, 1/4/11-30/6/11, finantat de LEA MathMode;

2. Invitat la IHES, Bures-sur-Yvette, 1/12/10–31/3/11.

Ornea Liviu - Universitatea din Cagliari (Italia), 14.03-14.04.2011.

8.7.4 Membru în echipe de grant

Brinzanescu Vasile - Membru intr-un proiect depus la IDEI 2011, castigat pentru perioada 2011-2014.

Cheptea Dorin - Am participat în grantul PN-II-1188 condus de Sergiu Moroianu. (În 2011, m-am ocupat în întregime de partea sa organizatorica.)

Moroianu Sergiu - Membru in echipa grantului PNII-ID-1187 (Liana David).

Ornea Liviu - GRant 529/2009, director Radu Pantilie, IMAR.

Pilca Mihaela Veronica - In timpul anului 2011 am fost membru in cadrul echipei grantului CNCSIS PNII IDEI 529/2009.

Vilcu Costin - Membru in echipa de cercetare a grantului PN II IDEI 1187/2008 (Director de grant L. David).