

Raport Anual

Institutul de Matematică "Simion Stoilow" al Academiei Române

2018

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3. L. Beznea, I. Cimpean: *Invariant, super and quasi-martingale functions of a Markov process*, **Stochastic Partial Differential Equations and Related Fields (Springer Proceedings in Mathematics & Statistics)**, Stochastic Partial Differential Equations and Related Fields, Bielefeld, Germany, October 10 -14, 2016, editori: Eberle, A., Grothaus, M., Hoh, W., Kassmann, M., Stannat, W., Trutnau, G., Springer (2018), pag. 407–420 ISBN: 978-3-319-74929-7
4. I. Beltiţă, D. Beltiţă, B. Cahen: *Berezin symbols on Lie groups*. **Geometric Methods in Physics XXXV**, XXXV Workshop on Geometric Methods in Physics, Białowieża, Polonia, 26 iunie – 2 iulie 2016, editori: P. Kielanowski, A. Odziejewicz, E. Previato, Birkhäuser (2018), pag. 11—17. ISBN: 978-3-319-63594-1
5. H. Mukaidani, H. Xu, V. Drăgan: *Robust Pareto Suboptimal Strategy for Uncertain Markov Jump Linear Stochastic Systems with Multiple Decision Makers*, **Annual American Control Conference (ACC) June 27–29, Wisconsin Center, Milwaukee, USA**, pag. 6628 – 6633, editori: <https://www.scimagojr.com/journalsearch.php?q=18692tip=sid>, (2018), ISBN (USB): 978-1-5386-5427-9, ISBN (CDR): 978-1-5386-5426
6. L. Maxim, J. Schürmann: *Characteristic classes of mixed Hodge modules and applications*, **Schubert Varieties, Equivariant Cohomology and Characteristic Classes – Impanga 15**, Conference on Algebraic Geometry held in Bedlewo, April 12–18, 2015, editori: Jaroslaw Buczyński, Mateusz Michalek, Elisa Postingshel, editura EMS Series of

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7. M. Gonzalez Villa, A. Libgober, L. Maxim: *Motivic zeta functions and infinite cyclic covers*, **Local and Global Methods in Algebraic Geometry**, Local and Global Methods in Algebraic Geometry, held at the University of Illinois at Chicago, May 12–15, 2016, editori: Nero Budur, Tommaso de Fernex, Roi Docampo, Kevin Tucker, Contemp. Math., 712, Amer. Math. Soc., Providence, RI (2018), pag. 117 – 141 ISBN: 978-1-4704-3488-5
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9. D. T. Vuza, M. Vlădescu: *Studies on the Transient, Continuous and Pulsed Regimes of High Power LEDs*, **Proceedings of Future Access Enablers for Ubiquitous and Intelligent Infrastructures Third International Conference FABULOUS**, Third International Conference FABULOUS, Bucharest, Octombrie 2017, editori: O. Fratu, N. Militaru, S. Halunga, Springer (2018), pag. 199 – 205 ISBN: 978-3-319-92213-3

2.5 Capitle in volume colective

1. F. Ambro: *On toric face rings II*, **Multigraded Algebra and Applications**, editori: V. Ene and E. Miller, Springer Proceedings in Mathematics & Statistics 238 (2018), pag. 1 – 40 ISBN: 978-3-319-90492-4
2. L. Leuştean, A. Sipoş: *An application of proof mining to the proximal point algorithm in $CAT(0)$ spaces*, în: **Mathematics Almost Everywhere. In Memory of Solomon Marcus**, editori: A. Bellow, C. Calude, T. Zamfirescu, World Scientific, Singapore (2018), pp. 153–167, ISBN-13: 9789813237308.

3 Cărți publicate în 2018

3.1 În străinătate

1. G. Kassay, V. Rădulescu: *Equilibrium Problems and Applications*, Academic Press, Elsevier, Oxford (2018), pag. 440 ISBN: 9780128110294

3.2 În alte edituri din România

1. I. Colojoară, A. Gheondea: *Lectures on Representations of Locally Compact Groups*, Theta (2018), pag. xxiv+186, ISBN: 978-606-8443-10-2

4 Volume editate în 2018

4.1 In străinătate

1. F. Nichita: *Hopf Algebras, Quantum Groups and Yang-Baxter Equations*, volum al unei sesiuni speciale in curs de publicare, MDPI books, Elvetia (2018);
2. F. Nichita: *Non-associative structures and other related structures*, MDPI, Axioms (2018), in curs de desfasurare, ISSN 2075-1680;
https://www.mdpi.com/journal/axioms/special_issues/non-associative_structures
3. F. Nichita: *Special Issue "Hopf Algebras, Quantum Groups and Yang-Baxter Equations 2017"*, MDPI, Axioms (2018), 7(1), ISSN: 2075-1680.
https://www.mdpi.com/journal/axioms/special_issues/hopf_algebras_2017

4.2 În țară

1. R. Gologan, C. Popescu et al.: *Romanian Mathematical Competitions, 2018*, Soc. St. Mat. din România (2018), pag. 21 – 37, 67 – 73, 79 – 94.
2. H. Bercovici, D. Gașpar, D. Timotin, F.-H. Vasilescu: *Operator Theory: Themes and Variations: Conference Proceedings, Timișoara, June 27–July 2, 2016*, Theta (2018), 204 pag., ISBN:978-606-8443-09-6

5 Citări (Lista completă este anexată)

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 - Citări 224 - fără autocitări: 203
 - Autocitări: 21
- Citări apărute în 2018
 - Citări 906 - fără autocitări: 808
 - Autocitări: 98

6 Premii

6.1 Premiile Academiei Române

Premii acordate în 2018 pentru lucrări din 2016

1. Arghir Dani-Zărnescu - Premiul Simion Stoilow
2. Mario Maican - Premiul Gh. Țițeica
3. Laura Elena Năstăsescu - Premiul Gh. Lazăr
4. Bogdan Ichim - Premiul Gh. Lazăr

6.2 Alte premii

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7 Conferințe

7.1 Organizări de conferințe

1. V. Ursu: *The 26th Conference on Applied and Industrial Mathematics*, Technical University of Moldova, Chișinău, September 20-23, 2018, <https://utm.md/event/caim-2018/>.
2. C. Ionescu: *The 26th National School in Algebra - Combinatorial structures in algebra and geometry*, Constantza, 26.08-1.09.2018, <http://math.univ-ovidius.ro/sna/>
3. I. Cimpean: *XIV-ème colloque Franco-Roumain de mathématiques appliquées*, Bordeaux, France, 27-31 August 2018, <https://france-roumanie.sciencesconf.org/>
4. I. Cimpean, A. Măcinic, L. Ignat, L. Maxim: *Workshop for Young Researchers in Mathematics*, Bucuresti, Romania, 17-18 Mai 2018, <http://math.univ-ovidius.ro/Workshop/2018/WYRM/>
5. L. Beznea: *The 21th Conference of the Romanian Society of Probability and Statistics*, Bucharest, April 13,14, 2018 <http://www.imar.ro/imar/afis-stat.pdf>
6. L. Beznea, I. Popescu: *Atelier de travail en stochastique et EDP*, Bucarest, September 14, 15, 2018 <http://www.imar.ro/imar/2018/Conferinte/Afis-EDP.pdf>
7. L. Beznea: Organizarea seriei de conferințe lunare IMAR, http://www.imar.ro/organization/activities/archive/talksEvents_arh-IMAR.Lectures.2018_s.php
8. L. Ignat, A. Zărnescu: *Transitions de phase et équations non locales*, IMAR, Bucuresti, 25-27 Aprilie 2018 <https://indico.math.cnrs.fr/event/3052/overview>
9. L. Ignat: *6th Edition Mathematical Analysis*, 24-26/01/2018, Universidad de Alicante, <https://dmat.ua.es/en/activities/6th-edition-mathematical-analysis.html>
10. L. Ignat: *Atelier de travail en Equations aux Derivees Partielles*, December 7-8, 2017, IMAR, Bucharest <http://imar.ro/CFM/PDE-Dec-2017.pdf>
11. R. Purice: *PDE, Harmonic Analysis and Mathematical Physics*, IMAR-București, 17 Ianuarie 2018, <http://www.imar.ro/imar/2018/Conferinte/MiniWshp-MPhi-2018-v3.pdf>

12. R. Purice: Membru în Comitetul de Coordonare al Colocviilor Franco-Române de Matematici Aplicate,
<https://france-roumanie.sciencesconf.org>
13. V. Drăgan: *15th International Conference on Informatics in Control, Automation and Robotics (ICINCO)*, Porto- Portugal, 29-31 July 2018,
<http://www.icinco.org/ProgramCommittee.aspx?y=2018>
14. V. Drăgan: *Conference on Applied Modeling in Economics, Finance and Social Sciences*, Tryavna, Gabrovo, 2-5 July, 2018,
<http://dataconferences.org/page/speakers-school>
15. V. Drăgan: *First Romanian Itinerant Seminar on Mathematical Analysis and its Applications (RISMAA)*, 20-21 Aprilie, Cluj-Napoca, 2018,
<http://www.cs.ubbcluj.ro/1st-rismaa/>
16. M. Aprodu, A. Măcinic, S. Moroianu: *Topology and Geometry: A conference in memory of Stefan Papadima (1953-2018)*, Mai 2018, IMAR
<http://math.univ-ovidius.ro/workshop/2018/TGSP/#/>
17. L. Maxim: *Singularities in the Midwest Workshop, V.*, Madison, WI, 23-24 martie 2018,
<http://www.math.wisc.edu/~maxim/Sing18.html>
18. L. Maxim: *Singularities in Geometry, Topology and Algebra*, at the Joint International Meeting of the American Mathematical Society and the Chinese Mathematical Society, Fudan University, Shanghai, China, 11-14 iunie 2018,
http://www.ams.org/meetings/international/2258_program_ss28.html#title
19. R. Răsdeaconu: *Complex Differential Geometry - Shanks Workshop*, Vanderbilt University, Nashville, TN, USA, 2-3 martie, 2018
adresa web: <https://my.vanderbilt.edu/ragworkshop/>
20. R. Răsdeaconu: *Hermitian Geometry*, AMS Spring Southeastern Sectional Meeting, Vanderbilt University, April 14-15, 2018
http://www.ams.org/meetings/sectional/2255_program_ss18.html#title
21. F. Nichita: *The 14-th International Workshop on Differential Geometry and its Applications*, UPG Ploiesti, 9-11 iulie 2019.
22. A. Otiman: *Cursul SMI Conformal Geometry, Cartan connection and locally conformally Kähler structures*, Cortona, Italia, 13-19 mai 2018,
(<https://gecogedi.dimai.unifi.it/event/573/>)
23. A. Otiman: *Special Hermitian metrics and symmetries on complex manifolds*, Regensburg, Germania, 11-14 septembrie, 2018
24. C. Vîlcu: *Bucharest Graph Theory Workshop on How to Span a Graph*, București, 15-17 august 2018,
<http://czamfirescu.tricube.de/BGTW.html>
25. A. Popa: *Sixth Bucharest Number Theory Day*, IMAR, 24.7.2018
<http://imar.ro/apopa/BNTD6.html>

26. A. Popa: *Workshop on L-functions and Galois Representations*, IMAR, 19.6.2018
<http://www.imar.ro/apopa/workshop2018.html>
27. D.Vuza: *2018 IEEE 24th International Symposium for Design and Technology in Electronic Packaging SIITME*, Iasi, octombrie 2018, www.siitme.ro
28. D. Timotin: *27th International Conference in Operator Theory*, Timișoara, 2–6 iulie 2018, <https://operatortheory27.wordpress.com/>

7.2 Conferințe susținute

1. A.L. Agore, *Equivalences of Hopf (co)module algebra structures*, International Category Theory Conference, University of Azores, Island of S. Miguel, Portugal, 8-14 Iulie 2018.
2. A.L. Agore, *On Hopf braces*, First antipode workshop, Université Libre de Bruxelles, Belgium, 19-20 March 2018.
3. M. Cimpoeaș, *On the algebraic properties of the ring of Dirichlet convolutions*, CAIM 2018, Chișinău, Republica Moldova, 20-23 septembrie 2018.
4. M. D. Staic, *Hochschild Cohomology and Generalizations*, Higher Structures 2 (A conference honoring Murray Gerstenhaber's 90th and Jim Stasheff's 80th birthday), University of Pennsylvania, Philadelphia PA, March 2018.
5. V. Ursu, *An observation on Moufang commutative loops with minimal condition*, International Conference on Mathematics, Informatics and Information Technologies dedicated to the illustrious scientist Valentin Belousov, State University "Alecus Russo" from Bălți, Moldova, April 19-21, 2018.
6. V. Ursu, *On free nilpotent commutative automorphic loops*, The 26th Conference on Applied and Industrial Mathematics, Technical University of Moldova, Chișinău, September 20-23, 2018.
7. G. Chiriacescu, *How I met A. Brezuleanu*, A day in Commutative Algebra, IMAR, October 9, 2018.
8. M. Cipu, *Aplicații ale derivatelor Hasse în combinatorică*, O zi de Algebră Comutativă, *in memoriam* Alexandru Brezuleanu (1943–1991), IMAR, 9 octombrie 2018.
9. D. Timotin, *Opérateurs de Toeplitz tronqués et symmetries complexes*, Atelier de travail Espaces de fonctions et théorie des opérateurs, București, 18-19 decembrie 2017.
10. D. Timotin, *Beyond truncated Toeplitz operators*, 6th Summer Workshop in Operator Theory, Krakow, 9–13 iulie 2018.
11. D. Timotin, *The solution to the Kadison–Singer problem*, 4th School of Functional Analysis and Geometry, Buenos Aires, 22–26 octombrie 2018.
12. D. Popescu, *Conjectura Bass Quillen si intrebarea lui Swan*, Bucuresti la Conferinta in memoria lui A. Brezuleanu, 9. Octombrie, 2018.
13. C. Ionescu, *Some special classes of modules*, Univ. Reggio-Calabria, 5.03.2018.

14. C. Ionescu, *Excellent rings: old and new*, A day in commutative algebra, IMAR, 9.10.2018.
15. I. Cîmpean, *On the nonlinear Schrödinger equation with white noise dispersion on quantum graphs*, 9th International Conference on Stochastic Analysis and Its Applications, Bielefeld, Germany, 3-7 September 2018
16. I. Cîmpean, *Quasimartingales functionals and their Doob-Meyer decompositions*, Atelier de travail en Stochastique et EDP, Bucharest, 14-15 September, 2018.
17. I. Cîmpean, *Ergodicity of continuous time Markov processes with applications to SDEs and Monte Carlo simulations*, Warm-Up Week, Bielefeld, Germany, 20-23 August, 2018.
18. I. Cîmpean, *(Local) Quasimartingales functionals and their Doob-Meyer decompositions*, The 21th Conference of the Romanian Society of Probability and Statistics, Bucharest, 13-14 April, 2018.
19. I. Cîmpean, *From the distribution of the zeros of a function to yet another sampling method*, Workshop for Young Researchers in Mathematics, Bucuresti, Romania, 17-18 Mai 2018.
20. O. Preda, *On the projection of Stein domains*, The 22nd annual conference of SSMR, Corabia, 25-26 May 2018.
21. C. Joița, *Bifurcation set of multi-parameter families of complex curves*, The singular side, Université de Lille, 16 - 17 mai, 2018.
22. L. Beznea, *Invariant, super and quasi-martingale functions of a Markov process*, University of California at San Diego, Probability Seminar, La Jolla, SUA, 3 mai 2018
23. L. Beznea, *Invariant, super and quasi-martingale functions of a Markov process*, University of Connecticut, USA, 8 mai 2018
24. L. Beznea, *Connections between the Dirichlet and the Neumann problem*, Perspectives in Modern Analysis, Holon, Israel, 28 mai -1 iunie 2018
25. L. Beznea, *Connections between the Dirichlet and the Neumann problem*, International Conference on Complex Analysis, Potential Theory, and Applications Dublin, Irlanda, 11-15 iunie 2018
26. L. Beznea, *Classical and recent results on the existence of invariant measures for Markov processes*, Warm-Up Week, Bielefeld, Germania, 20-24 august 2018
27. L. Beznea, *Multiple-fragmentation stochastic processes driven by a spatial flow*, Le 14-ème Colloque Franco-Roumain de Mathématiques Appliquées, Bordeaux, Franța, 27-31 august, 2018
28. L. Beznea, *Connections between the Dirichlet and the Neumann problem for integrable boundary data*, Current Trends in Applied Mathematics, Iași, 10, 11 septembrie 2018
29. Constantin-Nicolae Beli, *Representations of the p^n torsion of the Brauer group in characteristic p* , Sixth Bucharest Number Theory Day, 24 iulie 2018.

30. L. Beznea, *Invariant, super and quasi-martingale functions of a Markov process*, Atelier de travail en Stochastique et EDP, București, 14, 15 septembrie 2018
31. L. Beznea, *Stochastic equation of fragmentation and branching processes related to avalanches*, Modern Problems in Applied Mathematics, Tbilisi, Georgia, 19-21 septembrie, 2018
32. A. Zărnescu, *Various Incarnations of Half-Integer Planar Point Defects and their Qualitative Study: An Overview*, Mathematics and Science: In Honour of Sir John Ball, Oxford, Marea Britanie, Mai 2018.
33. A. Zărnescu, *The interplay between dynamics and defect formation in the Beris-Edwards equations of nematic liquid crystals*, M3ST 2018 Conference, Kalamata, Grecia, Septembrie 2018
34. A. Zărnescu, *Dynamics and defect formation in the nematohydrodynamics*, Jornada Cantabria de EDPs, Castro Urdiales, Spania, Septembrie 2018
35. L. Ignat, *Asymptotic behaviour for nonlocal diffusion-convection equations*, Universidad Autonoma de Madrid, Spain, 25/10/2018
36. L. Ignat, *Asymptotic behaviour for nonlocal diffusion-convection equations*, Workshop ICUB, U. Bucharest, 9 nov 2018
37. L. Ignat, *Asymptotic behaviour for fractional diffusion-convection equations*, Workshop Analyse, analyse numerique et controle des milieux continus, Univ. of Bucharest, Romania, 21-23/05/2018
38. L. Ignat, *Asymptotic behaviour for fractional diffusion-convection equations*, Ninth Itinerant Workshop in PDEs Institut de Mathematiques de Bordeaux, January 8-10, 2018
39. R. Purice, *Peierls' type effective Hamiltonians in the absence of Wannier functions*, IMAR-Bucuresti, 17 Ianuarie.
40. D. Tiba, *Optimal control methods in shape optimization*, Oberwolfach, Aprilie 2018
41. D. Tiba, *Fixed domain approaches in variational inequalities and free boundary problems*, Univ. Essen, Iulie 2018.
42. D. Tiba, *Optimal control methods in optimal design*, Univ. Bordeaux, August 2018.
43. D. Tiba, *Implicit parametrizations and applications in optimization and optimal control* Institutul Weierstrass , Berlin, Octombrie 2018.
44. V. Drăgan, *The minimization of the mean square of the deviation of a random signal from a given target*, Conference on Applied Modeling in Economics, Finance and Social Sciences, Tryavna, Gabrovo, 4 July, 2018.
45. V. Drăgan, *On the Asymptotic Structure of the Stabilizing Solution of the Riccati Equation Arising in Connection with the LQ Regulator Problem for a class of Singularly Perturbed Stochastic Systems*, The 26th Conference on Applied and Industrial Mathematics September 20-23, 2018 Chișinău, Rep. Moldova.

46. Vicențiu D. Rădulescu, *Alcuni modelli matematici nelle scienze applicate: singolarità, frattali e fluidi non-newtoniani*, Accademia delle Scienze dell'Umbria, 10 ianuarie 2018
47. V. Rădulescu, *Small and high perturbations of nonhomogeneous elliptic problems*, Two Nonlinear Days in Perugia on the occasion of Patrizia Pucci's 65th birthday, University of Perugia, 11-12 ianuarie 2018
48. V. Rădulescu, *Nonstandard phenomena in nonlinear elliptic PDEs*, Seminar, Analysis, Stockholm University, 7 februarie 2018
49. V. Rădulescu, *Equilibrium problems and applications*, Fourth Conference on Mathematical Sciences and Applications, King Saud University, Riyadh, 11-12 aprilie 2018 (Keynote Speaker)
50. V. Rădulescu, *Nonstandard phenomena in nonlinear elliptic equations*, Third International Conference on Modeling and Scientific Computing in Mathematical Engineering (MOCASIM2018), Cadi Ayyad University, Marrakesh, 26-27 noiembrie 2018
51. M. Aprodu, *Green's conjecture and vanishing of Koszul modules*, Moduli Spaces in Algebraic Geometry and Applications, Campinas, Brazilia, 26 – 31 iulie 2018.
52. M. Aprodu, *Green's conjecture and vanishing of Koszul modules*, Algebraic Geometry Conference, Haeundae, Coreea de Sud, 31 noiembrie – 1 decembrie 2018.
53. L. Maxim, *Mellin transformation, propagation and abelian duality - A day of singularities*, Northeastern University, Boston, New England, USA, 20 Aprilie 2018.
54. L. Maxim, *Topology of very affine manifolds - Special Session on Singularities of Spaces and Maps*, AMS Spring Eastern Sectional Meeting, Boston, New England, USA, 21 - 22 Aprilie 2018.
55. L. Maxim, *Topology of very affine manifolds - Workshop for Young Researchers in Mathematics*, Bucuresti, Romania, 17-18 Mai 2018.
56. L. Maxim, *Mellin transformation, propagation and abelian duality - Topology and Geometry: a Conference in Memory of Stefan Papadima*, Bucuresti, Romania, 28 - 31 Mai 2018.
57. L. Maxim, *Perverse Sheaves on Semi-abelian Varieties: Structure and Applications - Conference on Singularities: Geometric, Topological and Analytic Aspects*, Simons Institute, New York City, New York, USA, 13 - 17 August 2018.
58. C. Raicu, *Koszul modules and Green's conjecture - Classical Algebraic Geometry workshop*, Oberwolfach., July 2018.
59. C. Raicu *Koszul modules and Green's conjecture - New Trends in Syzygies workshop*, Banff, June 2018.
60. C. Raicu *Koszul modules and syzygies - Topology and Geometry: A conference in memory of Ștefan Papadima*, Bucharest, May 2018.

61. C. Raicu *Iterated local cohomology and Lyubeznik numbers for determinantal rings - Singularities*, Toric Geometry and differential equations, TU Chemnitz, March 2018.
62. R. Răscădeanu, *Counting real rational curves on K3 surfaces*, AMS Sectional Meeting, Sesiunea specială *Recent Progress and New Directions in Homotopy Theory*, Vanderbilt University, Nashville, USA, 14-15 aprilie.
63. M. Barcău, V. Paşol, C. Pleşca: *Monoidal Encryption over (\mathbb{F}_2, \cdot)* , SECITC 2018, Bucureşti, 8-9 Noiembrie 2018.
64. C. Anghel, *$(0; 2)$ - Mirror symmetry and omalous bundles on complete intersection surfaces of general type*, COST Action MP1405 "Quantum Structure of Spacetime" III. Annual Workshop : Quantum Spacetime '18, Sofia, 19 - 23 Februarie, (2018).
65. C. Anghel, *On a Class of Rota-Baxter Operators with Geometric Origin*, International Conference of the Balkan Physical Union 10th Jubilee , Sofia, 26 - 30 August, (2018).
66. C. Anghel, *Rota-Baxter operators and elliptic curves*, The 25-th Conference on Applied and Industrial Mathematics - CAIM 2018 , Chisinau, 20 - 23 Septembrie, (2018).
67. F. Ambro, *On Seshadri constants*, Workshop on Birational Geometry and Related Topics, SCMS, Shanghai, Noiembrie 1 2018
68. Florin Ambro, *Maximal Seshadri constants on toric varieties*, Conferinta lunara, IMAR, Octombrie 17 2018
69. F. Ambro, *Maximal Seshadri constants on toric varieties*, The 26th National School on Algebra: Combinatorial structures in algebra and geometry, Constanta, August 28 2018
70. V. Brînzănescu, *Co-Higgs bundles on ruled surfaces*, Topology and Geometry, A conference in memory of Stefan Papadima (1953-2018), May 28-31, 2018.
71. R. Pantilie, *Harmonic maps and twistorial structures*, Differential Geometry Workshop, Università degli Studi di Cagliari, Italia, 11-15.09.2018.
72. Cr. A. M. Anghel *Geometric interpretations for $U_q(sl(2))$ quantum invariants and categorification*, Journées des doctorants du GDR Tresses, Grenoble, Franța, 16-17 Noiembrie 2017.
73. Cr. A. M. Anghel *A Homological model for the coloured Jones polynomials* , Poster, Școala de iarna "Categorification, representation theory and symplectic geometry", Bonn, Germania, 20-24 Noiembrie 2017.
74. Cr. A. M. Anghel *A homological model for the coloured Jones polynomials*, Winter Braids VIII, CIRM - Luminy, Franța, 5-9 Februarie 2018.
75. Cristina A. M. Anghel *A homological model for the colored Jones polynomials*, TQFT et catégorification, Cargese, Franța, 15-20 Aprilie 2018,.
76. Cr. A. M. Anghel *A topological formula of the loop expansion of the colored Jones polynomial by using the Lawrence-Krammer-Bigelow representations and a short proof of the Melvin-Morton- Rozansky conjecture*, Scoală Tematică-Matemale, Franța, 22-27 Aprilie 2018.

77. Cr. A. M. Anghel *A topological model for the coloured Jones polynomials*, Workshop for Young Researchers in Mathematics, București, România, 17-18 Mai 2018.
78. Cr. A. M. Anghel *A homological model for the coloured Jones polynomials*, ICM 2018 Satellite Conference: Braid groups, configuration spaces and homotopy theory, Bahia, Brazilia, 23-27 Iulie 2018.
79. Cr. A. M. Anghel *Quantum invariants via topological intersection pairings*, North meets South Colloquium, Universitatea Oxford, Anglia, 9 Noiembrie 2018.
80. L. David, *Twist, elementary deformation and KK-correspondence in generalized geometry*, Special Metrics and Symmetries on Complex Manifolds, Universitatea din Regensburg (Germania), 10-15 septembrie 2018.
81. F. Belgun, *The Nash embedding in conformal geometry and the Hill equation*, Conferințele lunare IMAR, 21.02.2018.
82. F. Belgun, *Convexity for locally conformally symplectic manifolds*, Workshop “Complex geometry and Lie groups”, Universitatea din Florența, Italia, 11.06.2018.
83. F. Belgun, *Projective curves in conformal geometry*, Universitatea Babeș-Bolyai, 10.07.2018.
84. F. Belgun, *Torus actions on locally conformally symplectic manifolds*, Workshop “New trends and open problems in geometry and global analysis”, castle Rauisholzhausen, Germania, 30.08.2018.
85. F. Panaite, *$\{\sigma, \tau\}$ -Rota-Baxter operators, infinitesimal Hom-bialgebras and the associative Hom-Yang-Baxter equation*, in cadrul colocviului ”Rencontre Poisson”, Universitatea din La Rochelle (Franta), 14 iunie 2018
86. D. Matei, *Aomoto-Betti numbers of matroids and finite geometries*, A.M.S. Sectional Meeting, aprilie 2018, Boston, S.U.A.
87. D. Matei, *Resonance varieties and matrix tree theorems*, Topology and Geometry: A conference in memory of Stefan Papadima, I.M.A.R. Bucuresti, iunie 2018.
88. D. Matei, *Resonance varieties and matrix tree theorems*, Topology Seminar, octombrie 2018, University of Tokyo, Japonia.
89. D. Matei, *Volumes of knot and link cone-manifolds*, Graduate Topology Seminar, noiembrie 2018, University of Tokyo, Japonia.
90. D. Matei, *Real singularities and contact structures*, Workshop on Topology of Singularities, noiembrie 2018, Keio University, Tokyo, Japonia.
91. S. Moroianu, *Eta invariants of boundaries of locally conformally flat manifolds*, University of Lorraine, Nancy, October 5, 2018.
92. S. Moroianu, *Lectures on hyperbolic geometry*, A.I. Cuza University, Iași, October 15–19, 2018.
93. F. Nichita, *Non-associative structures, QYBE and applications*, - Noncommutative and non-associative structures, braces and applications, Malta, 11-15 March, 2018.

94. D. T. Vuza, R. Frosch, H. Koeberl, M. Vlădescu, *Investigations upon the possible phase noise introduced by optocouplers in RFID systems*, The 9th International Conference Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies ATOM-N, august 2018, Constanta.
95. L. Ornea, *Positivity of LCK potential*, Dept. of Math., Houston Univ., and Dept. of Math. Texas Tech (Lubbock), februarie 2018.
96. L. Ornea, *What is non-Euclidean geometry?*, Students Colloquium talk, Dept. of Math., Houston Univ., februarie 2018.
97. L. Ornea, *The embedding problem in differential geometry*, Colloquium talk, Texas Tech. (Lubbock), februarie 2018.
98. L. Ornea, *A course in Locally conformally Kaehler Geometry*, 7 lecții a câte 2 ore, Dip. di Matematica "Ulisse Dini", Firenze, aprilie 2018.
99. L. Ornea, *A characterization of locally conformally hyperkaehler manifolds*, IMPA, Rio de Janeiro, iunie 2018.
100. L. Ornea, *Subvarieties in Oeljeklaus-Toma manifolds*, UFFE, Rio de Janeiro, iunie 2018.
101. L. Ornea, *Subvarieties in Oeljeklaus-Toma manifolds*, invited speaker la Workshop-ul "Special metrics and symmetries on complex manifolds", 11-14 septembrie 2018, <http://www.mathemregensburg.de/pilca/>
102. A. Otiman, *Cohomology of Oeljeklaus-Toma manifolds*, Complex Geometry and Lie Groups Workshop, Florența, Italia, iunie 2018
103. A. Otiman, *Cohomology of Oeljeklaus-Toma manifolds*, Oberseminar Geometrie, Topologie und Analysis, Universität zu Köln, Germania, mai 2018
104. A. Otiman, *Cohomology of Oeljeklaus-Toma manifolds*, Séminaire de topologie, géométrie et algèbre, Université de Nantes, Franța, martie 2018
105. A. Otiman, *Locally conformally Kähler manifolds and their cohomology*, Oberseminar Differential Geometry, Max Planck Institut für Mathematik, Bonn, februarie 2018.
106. M. Stanciu, *Locally conformally symplectic reduction*, "Special Metrics and Symmetries on Complex Manifolds", Regensburg, Germania, 11-14 septembrie 2018.
107. M. Stanciu, *Locally conformally symplectic reduction*, "Workshop Geometry and PDEs", Timișoara, 12-13 octombrie 2018.
108. C. Vilcu, *Folding and gluing in convex geometry*, International Symposium on Discrete and Convex Geometry, Hebei Normal University, Shijiazhuang (China), 15-18 decembrie 2017.
109. C. Vilcu, *From convex surfaces to Alexandrov surfaces*, International Symposium on Discrete and Convex Geometry, Hebei Normal University, Shijiazhuang (China), 15-18 decembrie 2017.

110. C. Vilcu, *Double normals of most convex bodies*, Workshop for Young Researchers in Mathematics, IMAR, 17-18 mai 2018.
111. D. Ionescu-Kruse, *On the short-wavelength stabilities of some geophysical flows*, Analyse, analyse numérique et contrôle des milieux continus, Universitatea București, 21-23 mai 2018.
112. D. Ionescu-Kruse, *Some three-dimensional nonlinear geophysical flows and their instabilities*, Conferința lunară IMAR, București, 7 noiembrie 2018.
113. G. Pasa, *A paradox in Hele-Shaw displacements*, Universitatea Ovidius Constanta, 24-27 Octombrie
114. L. Badea, *Méthodes de décomposition du domaine à deux niveaux pour les inégalités de la deuxième espèce et les inégalités quasi-variationnelles*, XIV-ème colloque franco-roumain de mathématiques appliquées, Bordeaux (France), 27-31 août 2018.
115. L. Badea, *Two-level methods with optimal computing complexity for variational inequalities of the second kind*, Mini workshop ICUB-FMI UB, Bucharest, 9 November, 2018.
116. A. Diaconu, *Moments and Multiple Dirichlet Series*, IMAR, Workshop on *L-functions and Galois Representations*, 19 Iunie, 2018.
117. M. Prunescu, *On a continuous root for the rationals and other cases of continuous choice*. - Bucharest Number Theory Day, 24.07.2018
118. A. Sipoș, *Contributions to proof mining*, TU Darmstadt Logik Seminar, Darmstadt, Germania, 26 ianuarie 2018.
119. A. Sipoș, *Quantitative results on the method of averaged projections*, Workshop on Proofs and Computation, parte din HIM Trimester Program on Types, Sets and Constructions, Bonn, Germania, 2-6 iulie 2018.
120. A. Sipoș, *Quantitative results on the method of averaged projections*, Logic Colloquium 2018, Udine, Italia, 23-28 iulie 2018.
121. F. Nicolae, *On the ideal class group of an imaginary quadratic field*, Universitatea din Paderborn (Germania), Noiembrie 2018.
122. L. Leuştean, *Proof mining and applications*, Università degli studi di Trieste, 10.06.2018.
123. L. Leuştean, *An application of proof mining to the proximal point algorithm in $CAT(0)$ spaces*, Universitatea din București, 27.08.2018.
124. I. Popescu, *Spectrum recovery of covariance matrices*, Societatea de Probabilitati si Statistica din Romania, perioada Aprilie 13-14.
125. I. Popescu, *Free Functional Inequalities on the Circle*, Georgia Tech, 5 Septembrie.
126. I. Popescu, *Deterministic Couplings*, AMS regional meeting, San Francisco, Oct 27-28.
127. I. Popescu, *Free Functional Inequalities on the circle*, Academy of Sciences, Beijing, 10-14 Iulie.

128. D. Belțiță, *Inverse problems in representation theory*, “GAP XVI - Lie theory and applications to mathematical physics”, Universitatea de Vest, Timișoara, România, 29 mai - 2 iunie 2018.
129. D. Belțiță, *On the inverse problem in representation theory of nilpotent Lie groups*, “XXXVII Workshop on Geometric Methods in Physics”, Białowieża, Polonia, 1–7 iulie 2018.
130. D. Belțiță, *Dynamical systems and finite-dimensional approximations in Hilbert spaces*, “XIV-ème colloque franco-roumain de mathématiques appliquées”, Bordeaux, Franța, 27 – 31 august 2018.
131. C. Ambrozie, *Multivariate commutant lifting in the context of the test functions*, Université Bordeaux – Inst. Math. de Bordeaux, Franța, mai 2018.
132. C. Ambrozie, *Multivariate H -infinity interpolation with test functions*, 27th International Conference on Operator Theory, Timișoara, 2-6 iulie 2018.
133. F. Rădulescu, *Generalized Akeman Ostrand property*, 28-th Operator Theory Conference, Timișoara, 1-5 Iulie 2018.
134. A. Gheondea, *Symmetries versus conservation laws in dynamical quantum systems*, 27th International Conference in Operator Theory July 2-6, 2018, Timișoara, România
135. E. Mihăilescu, *Thermodynamic formalism for classes of endomorphisms and applications*, Pennsylvania State University, Center for Dynamical Systems and Geometry, USA, April 2018.
136. E. Mihăilescu, *Dynamics for Smale skew products and conformal systems with overlaps*, University of Illinois, USA, April 2018.

8 Alte activități

8.1 Conducere granturi

1. A. L. Agore: Director al grantului ”Tinere echipe” cod PN-III-P1-1.1-TE-2016-0124. Institutie gazda: IMAR; perioada de desfasurare a grantului: 1.10.2018–30.09.2020.
2. S. Burciu: Director grant - PN-III-P4-ID-PCE-2016-0157 - ”Hopf algebras representations and tensor categories”.
3. N. C. Bonciocat: Responsabil temă de cercetare în echipa *Equations diophantiennes* în cadrul GDRI ECO-Math (Groupement de Recherche International en Mathématiques visant l’Europe Centrale et Orientale - Director proiect: Radu Purice)
4. O. Preda: Proiect CNCS-UEFISCDI, numărul PN-III-P1-1.1-PD-2016-0182, etapa I: perioada 02 Mai - 31 Decembrie 2018;
5. L. Beznea: Director de proiect al grantului Idei, PN-III-P4-ID-PCE-2016-0372, din programul PNCDI III, 2017-2019.

6. R. Purice: Coordonator Român al Rețelei CNRS Franco-Româno-Ungară GDRI ECO-Math (Ianuarie 2018 - Decembrie 2021).
<http://www.imar.ro/GDRI/>
7. V. Rădulescu: *Analiza calitativă și numerică a unor clase de sisteme diferențiale anizotrope și aplicații*, Grant CNCS Idei “Proiecte de Cercetare Exploratorie” (CNCS-UEFISCDI PN-III-P4-ID-PCE-2016-0130)
8. V. Rădulescu: *Analysis of continuous and discrete mathematical models in biology, chemistry and genetics*, Grant N1-0064 finanțat de ARRS (Slovenian Research Agency)
9. M. Aprodu: CNCS-UEFISCDI project PN-III-P4-ID-PCE-2016-0030, Moduli Spaces and Homological Methods in Geometry and Topology.
10. L. Maxim: *Topology of complex algebraic varieties*, cercetare, 09/2018 – 08/2023, Simons Foundation Collaboration Grants for Mathematicians (USA).
11. R. Răsdeaconu: Grant de cercetare cu titlul ”Deformation techniques in real enumerative geometry and Kähler geometry” din partea ”Simons Foundation”, SUA (Award Number: 281266), 2013-2019.
12. R. Răsdeaconu: Grant NSF (DMS - 1711567) in valoare de 12000USD pentru organizarea conferinței ”The Topology of Real Algebraic Varieties: Deterministic and Random Aspects”, Shanks Workshop, March 11-12, 2017, Vanderbilt University.
13. R. Răsdeaconu: Grant NSF (DMS - 1804586) in valoare de 12570USD pentru organizarea conferinței ”Complex Differential Geometry”, Shanks Workshop, March 11-12, 2017, Vanderbilt University.
14. L. David: Director de proiect al grantului CNCS-UEFISCDI ’Geometrii speciale și structuri asociate’, cod proiect PN-III-ID-P4-PCE-2016-0019
15. S. Moroianu: Director de proiect Grant 0330/2017 ”Volumul varietatilor hiperbolice și Einstein”, PN-III-P4-ID-PCE-2016-0330, 2017-2019.
16. L. Ornea: Topics in locally conformally Kähler geometry, Program PNCDI III, PN-III-P4-ID-PCE-2016-0065, Contract nr. 8/12.07.2017
17. R. Diaconescu: *Formal Verification of Reconfigurable Systems* (CNCSIS grant PN-III-P2-2.1-PED-2016-0494)
18. D. Belțiță: Director de proiect al contractului PN-III-P1-1.1-MC-2018-1431 (aprilie–decembrie 2018), valoare totală 700 lei.
19. E. Mihăilescu: Director al grantului ”Dynamics and Differentiable Ergodic Theory”, PN III-P4-ID-PCE-2016-0823.

8.2 Conducere doctorate

- M. Staic: Paul Schrader - Bowling Green State University, teză susținută în Martie 2018.
- A. Zărnescu: Razvan Ceuca-BCAM, Spania, Admis septembrie 2018.
- L. Ignat: Andreea Grecu, Universitatea Bucuresti, co-tutelă împreună cu Liviu Marin.
- R. Purice: Alexandru Mustăța, SCOSAAR, anul III de pregătire a tezei de doctorat cu titlul *Integrale Feynman și ecuații cu derivate parțiale pe varietăți Riemann*.
- V. Rădulescu: V. Porumbescu. Doi doctoranzi sunt în faza de susținere a tezei.
- M. Aprodu - Filip Chindea - Universitatea din București (din octombrie 2016), Laura Filimon, Ștefan Deaconu - Universitatea din București (din octombrie 2017)
- L. Maxim: Eva Elduque și Christian Geske, anul V, University of Wisconsin-Madison (USA) și Fenglin Li, anul III, University of Science and Technology of China (China).
- C. Raicu: Michael Perlman(din 2015) și Zhao Gao, University of Notre Dame(din 2017).
- L. Ornea: Miron Stanciu (la Universitatea din București).
- A. Gheondea: Serdar Ay, *Dilations of Doubly Invariant Kernels Valued in Topologically Ordered *-Spaces*, Department of Mathematics, Bilkent University, June 2018.
- D. Timotin: Rewayat Khan și Akhsan Khan, de la *Abdus Salam School of Mathematical Sciences* (Lahore). Rewayat Khan a susținut teza în mai 2018.
- E. Mihăilescu: Rodica Marineac la SCOSAAR.

8.3 Membru în colective editoriale

- M. Cipu: Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie, Gazeta Matematică, Seria A
- D. Popescu: Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie.
- C. Năstăsescu: Analele Universității din București, Seria Matematică, Revue Roumaine des Mathématiques Pures et Appliquées, Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie, Analele Științifice ale Universității "Ovidius" din Constanța, Seria Matematică, Analele Universității din Craiova, Seria Matematică - Informatică, Mathematica (Cluj).
- C. Ionescu: Asia Mathematika
- R. Diaconescu: *Studies in Universal Logic* book series at Springer Basel, Switzerland.
- C. Joița: Secretar științific al comitetului de redacție la Revue Roumaine de Mathématiques Pures et Appliquées și la Mathematical Reports.
- Mihnea Colțoiu: Proceedings of the Romanian Academy, Series A, Acta Universitatis Apulensis

- L. Beznea: *Advances in Pure and Applied Mathematics*, De Gruyter, *Revue Roumaine Math. Pures Appl., Math. Reports*, (co-editor șef), *Proc. Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science*, Editura Academiei Romane
- V. Drăgan: *International Journal of Innovative Computing, Information and Control (IJICIC)*, Associate Editor, *ICIC-Express Letters*, Associate Editor, *IET Control Theory and Applications*, Associate Editor, *Innovativity in Modeling and Analytics Journal of Research (IMAJOR)*, Member of the Editorial Board, *Annals Series on Mathematics and Its Application*, Member of the Editorial Board.
- V. Rădulescu: *MATHEMATICS IN SCIENCE AND ENGINEERING Book Series*, Academic Press (an imprint of Elsevier Oxford), *De Gruyter Book Series in Nonlinear Analysis and Applications*, *Advances in Nonlinear Analysis* (Walter de Gruyter), *Boundary Value Problems* (Springer Open), *Nonlinear Analysis: Theory, Methods & Applications*, *Journal of Mathematical Analysis and Applications*, *Mathematical Methods in the Applied Sciences*, *Complex Variables and Elliptic Equations*, *Electronic Journal of Differential Equations*, *Discrete and Continuous Dynamical Systems, Series S* (American Institute of Mathematical Sciences), *Advances in Pure and Applied Mathematics* (Walter de Gruyter), *Opuscula Mathematica* (Krakow University), *Journal of Numerical Analysis and Approximation Theory* (Romanian Academy), *Ann. St. Univ. Ovidius Constanta*, *Annals of the University of Craiova - Mathematics and Computer Science Series*
- M. Aprodu: *Revue Roumaine Math. Pures Appl., Math. Reports*
- L. Maxim *Mathematics* (open access journal)
- V. Timofte: *Australian Journal of Mathematical Analysis and Applications (AJMAA)*.
- V. Brînzănescu: *Serdica Math J.*, *Proc. Rom. Acad.*, *Bull. Math.SSMR*, *Bull. UPB, An. Univ. Ovidius Constanta*.
- F. Nichita: *Axioms*, MDPI, Basel, Elvetia (ISSN 2075-1680), *Sci*, MDPI, Basel, Elvetia (ISSN 2413-4155).
- L. Ornea: *Bulletin Mathématique de la Soc. Sci. Mathématiques de Roumanie*, *Math. Reports*, *Revue roumaine de Mathématiques pures et appliquées*, *Annals of the University of Bucharest (Math. series)*.
- D: Belțiță: *Analele Științifice ale Universității „Al.I.Cuza” din Iași —Matematică*.
- F. Rădulescu: *Journal Operator Theory*, *Libertas Mathematica*
- A. Gheondea: *Journal of Operator Theory – Fundația Theta*, București — din 1995, *Complex Analysis and Operator Theory – Birkhäuser Verlag*, Basel — din 2007, *Opuscula Mathematica – AGH University of Science and Technology*, Krakow — din 2005, *Journal of Function Spaces – Hindawi Limited*, London — din 2008.
- D. Timotin: *Journal of Operator Theory*, *Revue Roumaine de Mathématiques Pures et Appliquées*, *Mathematical Reports*, *Analele Științifice ale Universității “Alexandru Ioan Cuza” din Iași*, *Matematică*.
- E. Mihăilescu: *Discrete and Continuous Dynamical Systems-S*.

8.4 Lucrări acceptate la publicat

1. A.L. Agore: *Constructing Hopf braces*, International Journal of Mathematics, doi.org/10.1142/S0129167X18500891.
2. M. Cimpoeaş, F. Nicolae: *On the restricted partition function*, Ramanujan Journal, pag. 24
3. M. Cimpoeaş, F. Nicolae: *Independence of Artin L-functions*, Forum Mathematicum, pag. 9
4. M. Cimpoeaş: *Remarks on the restricted partition function*, Math. Reports, pag. 10
5. W.Bruns, B. Ichim, C. Söger: *Computations of volumes and Ehrhart series in four candidates elections*, acceptata la Annals of Operations Research.
6. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu: *Hopf algebras action and transfer of Frobenius and symmetric properties*, acceptata la Mathematica Scandinavica, 2018.
7. A. Petrescu-Nita, M. D. Staic: *Automorphisms of the k -algebra $k[X_1, \dots, X_m]$* , acceptata la Journal of Algebra and its Applications (to appear in 2019).
8. V. Ursu: *On the pre-ordering of automorphic loops and Moufang loops*, acceptata la Revue Roumaine de Mathematiques Pures et Appliquees.
9. M. Cipu, A. Filipin, Y. Fujita: *An infinite two-parameter family of Diophantine triples*, acceptată la Bulletin of the Malaysian Mathematical Sciences Society.
10. M. Cipu; *Complete solution of the Diophantine equation $x^y + y^x = z^z$* , acceptată la Czechoslovak Mathematical Journal, pag. 6
11. D. Popescu: *Simple General Neron Desingularization in local \mathbf{Q} -algebras*, apare in Communications in Algebra, arXiv/AC:1802.05109.
12. L. Beznea, I. Cimpean, M. Röckner: *A new approach to the existence of invariant measures for Markovian semigroups*, acceptata la Annales de l'Institut Henri Poincare (B) Probability and Statistics.
13. M. Colţoiu: *Some open problems concerning q -convexity and Stein spaces*, acceptata la Complex Variables and Elliptic Equations, pag. 4.
14. H. Wu, X. Xu, A. Zărnescu: *Dynamics and flow effects in the Beris-Edwards system modelling nematic liquid crystals* acceptata la Archive for Rational Mechanics and Analysis.
15. R. Ignat, L. Nguyen, V. Slastikov, A. Zărnescu: *On the uniqueness of minimisers of Ginzburg-Landau functionals* acceptata la Annales de l'ENS.
16. S. Day, A. Zărnescu: *Sphere-valued harmonic maps with surface energy and the K_{13} problem*, acceptata la Advances in Calculus of Variations.
17. Gh. Nenciu, I. Nenciu: *On essential self-adjointness for first order differential operators on domains in \mathbb{R}^d* acceptata la Journal of Spectral Theory

18. H. Cornean, B. Helffer, R. Purice: *Peierls' substitution for low lying spectral energy windowss*, acceptată la Journal of Spectral Theory.
19. Ho. Cornean, B. Helffer, R. Purice: *A Beals criterion for magnetic pseudodifferential operators proved with magnetic Gabor frames*, acceptată la Communications in Partial Differential Equations.
20. H. Cornean, V. Iftimie, R. Purice: *Peierls' substitution via minimal coupling and magnetic pseudo-differential calculus*, acceptată la Reviews in Mathematical Physics.
21. V. Drăgan, I.L. Popa, S. Aberkane: *Optimal filtering of a signal generated by a system modeled by Ito differential equations with periodic coefficients: The dichotomic case*, acceptata la Bulletin Matematique, publicatie a Societatii de Matematica din Romania.
22. M. Maican: *Moduli of sheaves supported on curves of genus two in a quadric surface*, acceptată la Geometriae Dedicata.
23. M. Maican: *Moduli of stable sheaves supported on curves of genus three contained in a quadric surface*, acceptată la Advances in Geometry.
24. L. Maxim, M. Saito, J. Schürmann: *Thom-Sebastiani theorems for filtered D-modules and for multiplier ideals*, acceptata la: Int. Math. Res. Not. (published online); DOI: 10.1093/imrn/rny032.
25. L. Maxim, M. Saito, J. Schürmann: *Spectral Hirzebruch-Milnor classes of singular hypersurfaces*, acceptata la: Math. Ann. (published online); DOI: 10.1007/s00208-018-1750-4.
26. L. Maxim, S. Yokura: *Homological congruence formulae for characteristic classes of singular varieties*, acceptata la: European Journal of Mathematics (to appear); DOI: 10.1007/s40879-018-0305-2.
27. Y. Liu, L. Maxim, B. Wang: *Generic vanishing for semi-abelian varieties and integral Alexander modules*, acceptata la: Mathematische Zeitschrift.
28. C. Raicu, J. Weyman: *Syzygies of determinantal thickenings and representations of the general linear Lie superalgebra*, Acceptat la Acta Mathematica Vietnamica.
29. A. Lőrincz, C. Raicu, J. Weyman: *Equivariant D-modules on binary cubic forms*, Accep-
tat de revista Communications in Algebra.
30. I. Chiose, R. Răşdeaconu, I. Şuvaina: *Balanced metrics on uniruled manifolds*, acceptat
la Communications in Analysis and Geometry.
31. Constantin N. Beli, Wai Kiu Chan, María Inés Icaza, Jingbo Liu: *On a Waring's problem
for integral quadratic and Hermitian forms*, acceptată la Trans. Amer. Math. Soc. În curs
de apariție, publicată online la <http://www.ams.org/journals/tran/0000-000-00/S0002-9947-2018-07571-7/home.html>
32. R. Pantilie: *Projective structures and ρ -connections*, acceptata la J. Inst. Math. Jussieu.
33. R. Pantilie: *Harmonic morphisms and the Penrose-Ward transform*, acceptata la Atti
Accad. Naz. Lincei Rend. Lincei Mat. Appl.

34. F.A. Belgun, O. Goertsches, D. Petrecca: *Locally conformally symplectic convexity*, J. Geom. Phys. 135 (2019), 235-252.
35. L. Liu, A. Makhlouf, C. Menini, F. Panaite: *$\{\sigma, \tau\}$ -Rota-Baxter operators, infinitesimal Hom-bialgebras and the associative (Bi)Hom-Yang-Baxter equation*, acceptata la Canad. Math. Bull.
36. Florin Felix NICHITA: *Unification theories. Examples and applications*, acceptata la revista Axioms (2018).
37. S. Ay, A. Gheondea: *Invariant weakly positive semidefinite kernels with values in topologically ordered -spaces*, acceptata la *Studia Mathematica*.
38. L. Ornea, M. Verbitsky: *Positivity of LCK potential*, acceptata la J. Geom. Analysis, <https://doi.org/10.1007/s12220-018-0046-y>
39. L. Ornea, M. Verbitsky, V. Vuletescu: *Flat affine subvarieties in Oeljeklaus-Toma manifolds*, acceptata la Math. Zeitschrift, <https://doi.org/10.1007/s00209-018-2121-2>
40. N. Istrati, A. Otiman: *De Rham and twisted cohomology of Oeljeklaus-Toma manifolds*, acceptata la Ann. Inst. Fourier (Grenoble), arXiv:1711.07847
41. J. Rouyer, Co. Vîlcu: *Farthest points on most Alexandrov surfaces*, acceptată la Advances in Geometry.
42. L. Badea: *Restricted Additive Schwarz Method for Some Inequalities Perturbed by a Lipschitz Operator*, in P. E. Bjørstad et al. (eds.), Domain Decomposition Methods in Science and Engineering XXIV, Lecture Notes in Computational Science and Engineering 125, Springer International Publishing AG, 2018. https://doi.org/10.1007/978-3-319-93873-8_9
43. G. P. Panasenko, R. Stavre: *Viscous fluid-thin elastic plate interaction; asymptotic analysis with respect to the rigidity and density of the plate*, acceptată la Applied Mathematics and Optimization, DOI: 10.1007/s00245-018-9480-2.
44. G. P. Panasenko, R. Stavre: *Viscous fluid-thin cylindrical elastic tube interaction: asymptotic analysis on contrasting properties*, acceptată la Applicable Analysis, DOI: 10.1080/00036811.2018.1442000.
45. A. Diaconu: *On the third moment of $L(\frac{1}{2}, \chi_d)$ I: the rational function field case*, acceptată la Journal of Number Theory.
46. V. Alexandru, M. Vâjăitu, A. Zaharescu: *Generating sets of Galois equivariant Krasner analytic functions*, acceptata la Rend. Semin. Mat. Univ. Padova, pag. 1-14
47. V. Alexandru, M. Vâjăitu, A. Zaharescu: *Isomorphism theorems for Galois groups of splitting fields of polynomials*, acceptata la Commun. Algebra, pag. 1-9
48. M. Junge, B. Udrea: *Generalized q -gaussian von Neumann algebras with coefficients, I. Relative strong solidity*, acceptata la Analysis and PDF.

49. M. Junge, B. Udrea: *Generalized q -gaussian von Neumann algebras with coefficients, II. Absence of central sequences*, acceptata la Mathematical Reports.
50. M. Junge, B. Udrea: *Generalized q -gaussian von Neumann algebras with coefficients, III. Unique prime factorization results*, acceptata la Revue Roumaine Math. Pures et Appl.
51. M. Junge, S. Longfield, B. Udrea: *Some classification results for generalized q -gaussian algebras*, acceptata la Documenta Mathematica.

8.5 Preprinturi

1. A.L. Agore, L. Năstăsescu: *Bicrossed products with the Taft algebra*, arXiv:1712.06095v1
2. S. Burciu: *Representations of factorizable Hopf algebras*, arXiv:1709.02176 (math.QA) /2018, pag. 34
3. Mircea Cimpoeaş: *A note on the linear independence of a class of series of functions*, <https://arxiv.org/pdf/1802.03377>, pag. 14
4. M. Cimpoeaş: *On a Zeta-Barnes type function associated to graded modules*, <https://arxiv.org/pdf/1803.11510>, pag. 12
5. M. Cimpoeaş: *On the restricted partition function via determinants with Bernoulli polynomials*, <https://arxiv.org/pdf/1806.08996>, pag. 26
6. M. Cimpoeaş: *Polarization and spreading of monomial ideals*, <https://arxiv.org/pdf/1807.05028>, pag. 10
7. M. Cimpoeaş: *On the algebraic properties of the ring of Dirichlet convolutions*, <https://arxiv.org/pdf/> pag. 15
8. M. Cimpoeaş: *On the semigroup ring of holomorphic Artin L -functions*, <https://arxiv.org/pdf/1810.08813>, pag. 11
9. W.Brunns, B. Ichim: *Polytope volume by descent in the face lattice and applications in social choice*, Preprint arXiv:1807.02835.
10. B. Ichim, A. Zarojanu: *On the behavior of the size of a monomial ideal*, Preprint arXiv:1602.08025.
11. S. Carolus, M. D. Staic: *G -Algebra Structure on the Higher Order Hochschild Cohomology $H_{S^2(A,A)}^*$* , arXiv:1804.05096.
12. V. Ursu: *Undecidability of the elementary theory of finite commutative loops*, Preprint series of the Institutes of Mathematics of the Romanian Academy (ISSN 0250 3638), nr.1/2018, pag.15.
13. D. Popescu: *On a question of Swan with an appendix by Kestutis Cesnavicius*, arXiv/AC:1803.06956.
14. M. A. Khan, D. Timotin: *Algebras of block Toeplitz matrices with commuting entries*, preprint arXiv:1811.04252.
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8.6 Cooperări științifice

- Rețeaua de tip GDRI-*Eco-Math* organizată de CNRS(Franța) în colaborare cu Academia de Științe din Ungaria și Academia Română (2017-2020).
- Centrul Francfon de Matematică organizat în cadrul IMAR în colaborare cu Agenția Universitară a Francofoniei și în parteneriat cu Universitatea din București.
- În 2018 IMAR a primit 75 de vizite științifice, repartizate astfel: Franța (31), Germania (8), SUA (6), Tunisia(4), Spania(3), Marea Britanie (3), Israel (2), Canada (2), Coreea(1), Singapore (1), Argentina(1), Brazilia(1), China(1), Turcia(1), Italia(1), Polonia(1), Belgia(1).
- L. Năstăsescu - Max Planck Institut, Bonn, Germania - 1 lună
- C. Ionescu - vizită științifică Univ. Messina (Italia), martie 2018.
- E. Mihăilescu - Profesor invitat la Center for Dynamics and Geometry, Pennsylvania State University, University of Illinois, Urbana-Champaign, USA, Univ. Lille(Franța).
- Cr. A. M. Anghel - Seminarul de Topologie Univ. Paris Diderot (noiembrie 2017 - iulie 2018), Seminarul de Topologie Univ. Oxford (septembrie - noiembrie 2018).
- F. Belgun - Univ. Hamburg (8-18 martie 2018).
- D. Ionescu-Kruse - vizit științifice la Shanghai Normal University, China(aprilie 2018) și la Erwin Schrodinger Institute (ESI) Viena, Austria, programul *Mathematical Aspects of Physical Oceanography*(februarie 2018).
- R. Stavre - vizită științifică la Institut Camille Jordan UMR CNRS 5208, Saint-Etienne, Franța, 17 martie-15 aprilie 2018.