

# Raport Anual

Institutul de Matematică "Simion Stoilow" al Academiei Române

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# 1 Lucrări publicate la finele lui 2014 și neconținute în Raportul pe 2014

## 1.1 În reviste din străinătate cotate ISI

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1. Liviu Ornea: *O introducere în geometria diferențială*, editura Fundația Theta (2015), pag. 336 ISBN: 978-606-8443-06-5

## 4 Volume editate în 2015

### 4.1 In străinătate

1. L.F. Macia-Ramos, Gh. Păun, A. Riscos-Nunez, L. Valencia-Cabrera, *Thirteen Brainstorming Week on Membrane Computing*, Fenix Editora, Sevilla (2015), 372 de pagini; 36 de autori, ISBN: 978-84-944366-2-8
2. A. Moroianu, L. Ornea *Journal of Geometry and Physics*, 91. *Conformal and Complex Geometry in Honour of Paul Gauduchon*, editura Sciencedirect (2015), pag. 1 – 191 ISSN: 0393-0440
3. Florin F. Nichita: *Hopf Algebras, Quantum Groups and Yang-Baxter Equations 2015*, Axioms, MDPI (2015), 4(4), pag. 423-435; ISBN: 2075-1680.  
[http : //www.mdpi.com/journal/axioms/special\\_issues/hopf\\_algebras\\_2015](http://www.mdpi.com/journal/axioms/special_issues/hopf_algebras_2015)
4. Florin F. Nichita: *Hopf Algebras, Quantum Groups and Yang-Baxter Equations 2014*, Axioms, MDPI (2014 / 2015), 4(1), pag. 32-70; 4(2), pag. 134-155, 177-193; ISBN: 2075-1680. [http : //www.mdpi.com/journal/axioms/special\\_issues/hopf\\_algebras\\_2014](http://www.mdpi.com/journal/axioms/special_issues/hopf_algebras_2014)
5. Eugen Mihailescu and Bernd Stratmann, **Oberwolfach Reports**, Volume 11, Issue 4, 2014, European Mathematical Society (2015), pag. 2569-2617, ISSN 1660-8933.
6. Vicențiu D. Rădulescu, Guest Editor of the Special Issue *Singular and Degenerate Phenomena in Nonlinear Analysis*, *Nonlinear Analysis: Theory, Methods & Applications*, vol. 119, pages 1-500, June 2015  
<http://www.sciencedirect.com/science/journal/0362546X/119>
7. S. Cojocaru, M. Margenstern, Gh. Păun, S. Verlan - Editors, *Fundamenta Informaticae*, vol. 138, no. 1-2 (2015).

### 4.2 În țară

1. M. Aprodu, L. Ornea *Bulletin Mathématique 58 (3) Dedicated to Vasile Brînzănescu at 70*, editura SSMR (2015), pag. 223 – 368 ISSN: 1220-3874

## 5 Citări (Lista completă este anexată)

### • Citări apărute în 2014 și neconținute în Raportul pe 2015

- Citări - fără autocitări: 203
- Autocitări: 11

### • Citări apărute în 2015

- Citări - fără autocitări: 896
- Autocitări: 61

**Notă** Statistica de mai sus nu include citările domnilor: *Gheorghe Păun*, *Cristian Sminchișescu* și *Marius Leordeanu*.

## 6 Premii

### 6.1 Premiile Academiei Române

- Alexandru Popa: Premiul “Nicolae Dinculeanu” pentru rezultate de exceptie in cercetarea matematica.
- Ionut Chiose, Premiul Academiei acordat in 2015 pentru lucrari publicate in 2013
- Ravan Iagar, Premiul Academiei acordat in 2015 pentru lucrari publicate in 2013
- Daniel Matei , Premiul Academiei acordat in 2015 pentru lucrari publicate in 2013

### 6.2 Alte premii

- Gh. Păun: Doctor Honoris Causa al Universității Agora din Oradea
- Gh. Păun: Omul anului în cultura argeșeană, Direcția Județeană pentru Cultură Argeș

## 7 Conferințe

### 7.1 Organizări de conferințe

1. Lucian Beznea, Dan Timotin: The Eighth Congress of Romanian Mathematicians, Iasi, 26 iunie–1 iulie 2015, <http://www.imar.ro/congmatro8/conf.php>
2. Radu Purice: Al 8-lea Congres al Matematicienilor Români, Iași, 26 Iunie - 1 Iulie, Co-organizator al Sesiunii Speciale: “Spectral Theory and Applications in Mathematical Physics”. [http://www.imar.ro/congmatro8/special\\_section5.1.php](http://www.imar.ro/congmatro8/special_section5.1.php)
3. Radu Purice: Coorganizator al celei de **a 2-a ediții a Școlii de Vară Franco-Române de Matematici Aplicate**, Sinaia, 1-9 Iulie 2015. <http://imar.ro/RoFrSummerSchool2015/description.php>
4. Anca Macinic, Laurentiu Maxim, Stefan Papadima: Special Session *Geometry and Topology of differentiable manifolds and algebraic varieties*, **The Eighth Congress of Romanian Mathematicians**, Iasi, 26 iunie–1 iulie 2015 <http://www.imar.ro/congmatro8/conf.php>
5. Mihnea Colțoiu a fost unul dintre organizatorii Sectiei *Real and Complex Analysis, Potential Theory* la The Eighth Congress of Romanian Mathematicians, Iasi, 26 iunie - 1 iulie 2015.
6. Eugen Mihailescu, Organizer–Ergodic Theory and Dynamical Systems session, at the 8-th Congress of Romanian Mathematicians, Iasi, June 2015, <http://www.math.uaic.ro/cmr2015/>
7. Dorin Popescu, Mihai Epure: The 23rd National School on Algebra: Interactions of Computer Algebra with Commutative Algebra, Combinatorics and Algebraic Statistics, Bucuresti, 31 aug-4 sep 2015, <http://math.univ-ovidius.ro/sna/edition.aspx?cat=Organizers&itemID=9>



8. Lucian Beznea, Ionel Popescu: Colloque Franco-Roumain en Théorie des Probabilités, Bucuresti, 30 octombrie–1 noiembrie 2015,  
[http://imar.ro/organization/activities/standalone/coll\\_prob.html](http://imar.ro/organization/activities/standalone/coll_prob.html)
9. Ionel Popescu: Sectiunea de probabilitati, Congresul Matematicienilor Romani, Iasi, 26 iunie -1 iulie, 2015
10. A. Zarnescu: Mini-symposium “*Mathematical Analysis of Liquid Crystals*”, SIAM PDE Conference, Arizona, SUA, Decembrie 2015
11. Lori Badea: The Fourth International Conference on Parallel, Distributed, Grid and Cloud Computing for Engineering, Dubrovnik, Croatia, 24-27 March 2015 (membru în Editorial Board),  
<http://www.civil-comp.com/conf/peng2015/peng2015.htm>
12. Radu Purice: A facut parte din Comitetul de Organizare al celui de **al 13-lea Colocviu Franco-Român de Matematici Aplicate, Iasi 2016** a cărui organizare a început din luna Mai a anului 2015.
13. Lucian Beznea: Organizarea seriei de conferințe lunare IMAR,  
<http://imar.ro/organization/activities/imarLectures.php>
14. Dan Tiba: minisesiune Modelling and Control in Contact Mechanics, IFIP Nice June 2015 (cu Mircea Sofonea  
<http://ifip2015.inria.fr/symposia>
15. Ruxandra Stavre The 36-th ”Caius Iacob” Conference on Fluid Mechanics and its Technical Applications, Bucharest, October 29-30, 2015  
[www.incas.ro](http://www.incas.ro)
16. Alina Cojocaru, Vicentiu Pasol, Alexandru Popa: Third Bucharest Number Theory Day, 3 Aug. 2015  
<https://dl.dropboxusercontent.com/u/745435/web/NTday3.html>
17. Nicolae Bonciocat, Mihai Cipu, Florin Nicolae: Special Session on Algebra in Memory of Prof. Șerban Basarab, 22nd May 2015, Faculty of Mathematics and Computer Science, Ovidius University of Constanța,  
<http://math.univ-ovidius.ro/Workshop/2015/WYRM/Special-Session.html>
18. Liviu Paunescu, F. Radulescu: Group Theory and Operator Algebra, Bucuresti, 29.09-3.11.2015,  
[http://www.imar.ro/cjoita/IMAR/Schedule\\_GTandOA.pdf](http://www.imar.ro/cjoita/IMAR/Schedule_GTandOA.pdf)
19. F. Radulescu: Summer Workshop in Operator Algebras and Applications, Bucuresti, 13-14.07.2015  
<http://www.imar.ro/cjoita/IMAR/Workshop-OpAlg,July-2015.pdf>
20. Cristian Sminchisescu: IEEE International Conference on Computer Vision (ICCV), 2015, Area Chair.

21. Radu Iordanescu, Florin Nichita, Mihai Pascu: The 12-Th International Workshop On Differential Geometry And Its Applications, Universitatea Petrol si Gaze din Ploiesti, septembrie 23 - 26, 2015.
22. L. Maxim: Conference on *Stratified spaces in geometric and computational topology and physics*, Madison, WI, March 30-April 2, 2015,  
<http://www.math.wisc.edu/~maxim/Sing15.html>
23. Daniel Matei, Anca Macinic, L. Maxim: Workshop on *Computational Geometric Topology in Arrangement Theory*, ICERM-Brown University, July 6-10, 2015,  
[https://icerm.brown.edu/topical\\_workshops/tw15-4-cgtat/](https://icerm.brown.edu/topical_workshops/tw15-4-cgtat/)
24. V. Dragan: 12-th International Conference on Informatics in Control, Automation and Robotics (ICINCO), Colmar, Alsace, France, 21-23 July, 2015,  
[www.icinco.org](http://www.icinco.org)
25. Vicențiu D. Rădulescu: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control Section at The Eight Congress of Romanian Mathematicians, 26 June-1 July 2015, Iași  
<http://www.math.uaic.ro/cmr2015/index.php?sections>
26. Vicențiu D. Rădulescu: Equilibrium and Optimization Methodology in Finance and Economics, King Saud University, Riyadh, Saudi Arabia, 9-11 November 2015  
<http://npst.ksu.edu.sa/en/iceomfe/about>
27. L. Maxim: Special Session on *Singularities in Algebra, Geometry and Topology* at the 2015 Central Fall Sectional AMS Meeting, Chicago, IL, October 3-4, 2015,  
[http://www.ams.org/meetings/sectional/2219\\_program\\_ss33.html#title](http://www.ams.org/meetings/sectional/2219_program_ss33.html#title)
28. L. Leustean: Secțiunea specială Logic in Computer Science, The Eighth Congress of Romanian Mathematicians, Iași, România, 26.06 - 01.07.2015
29. L. Ignat, Anca Macinic, L. Maxim: Workshop for Young Researchers In mathematics, Universitatea Ovidius Constanta, 21-24/05/2015,  
<http://math.univ-ovidius.ro/Workshop/2015/WYRM/>
30. Marian Aprodu, L. Ornea: Interactions between Algebra, Geometry & Topology, IMAR București, 16-17 Mai 2015  
<https://dl.dropboxusercontent.com/u/31273784/web/VBLXX/Welcome.html>
31. V. Ursu: Conferința de comemorare a prof. Petre Osmățescu organizată în cadrul Seminarului de științe Matematice, Chișinău, UTM, 5 iulie 2015,  
[www.utm.md/](http://www.utm.md/)
32. O. Dumitrescu: *Short Courses on Higgs bundles*, Leibniz Universitt Hannover, Iulie 2015, (impreama cu Marcus Sperling), <https://sites.google.com/site/shortcoursesonhiggsbundles/home>
33. O. Dumitrescu: *Quantization of Spectral Curves*, Osaka University Advanced Mathematics Institute, Noiembrie 2015 (impreama cu Yoshihiro Ohnita, Masato Okado and Motohico Mulase),  
<https://sites.google.com/site/quantizationofspectralcurves/home>

34. Corina Calinescu: AMS Special Session on "Representation Theory, Vertex Operator Algebras, and Related Topics", Rutgers University, November 14-15, 2015
35. Irina Nenciu: SIAM Conference on Nonlinear Waves and Coherent Structures, Philadelphia, August 8 – 11, 2016,  
<http://www.siam.org/meetings/nwcs16/>
36. Mihai Staic: co-organizator 49-th Spring Topology and Dynamics Conference, Bowling Green Ohio, May 14-16, 2015  
<http://personal.bgsu.edu/~xiex/STDC2015.html>
37. Mihai Staic: co-organizator Special Session on Cohomology of Algebras and Deformation Theory, at the AMS meeting at Loyola University, Chicago, IL October 2-4, 2015.  
[http://www.ams.org/meetings/sectional/2219\\_program\\_ss16.html](http://www.ams.org/meetings/sectional/2219_program_ss16.html)
38. Dan Vuza: Membru in Comitetul director si in Comitetul stiintific ale conferintei 2015 IEEE 21th International Symposium for Design and Technology in Electronic Packaging SIITME, Bucuresti, octombrie 2015, [www.siitme.ro](http://www.siitme.ro)
39. Rareş Răşdeaconu: "Recent Advances in Kähler Geometry"- Conference in conjunction with the 30th annual Shanks Lecture delivered by Prof. Shing-Tung Yau (Harvard University), Vanderbilt University, Nashville, SUA, 18-23 martie 2015, co-organizată in colaborare cu I. Şuvaina, John Ratcliffe, and C. Koca (Vanderbilt University),  
<http://www.math.vanderbilt.edu/kahlergeometry/>
40. C. Sminchisescu: Seminar Romania-Franta (IMAR-INRIA), Accurate Human Modeling in Video, *26 noiembrie 2015, IMAR, Bucuresti.*

## 7.2 Conferințe susținute

1. Vasile Brinzanescu, *Algebraically complete integrable systems I*, Center for Geometry and Physics, IBS Pohang, Korea, 17.11.2015.
2. Vasile Brinzanescu, *Algebraically complete integrable systems II*, Center for Geometry and Physics, IBS Pohang, Korea, 19.11.2015.
3. Costin Vîlcu, *On the envelope of  $\alpha$ -sections of a convex body*, 5th Workshop for Young Researchers in Mathematics, Constanta, 21.05.2015.
4. Costin Vîlcu, *Baire categories for Alexandrov surfaces*, The Eighth Congress of Romanian Mathematicians, Iași, 29.06.2015.
5. Dan Tiba, *Generalized solutions of implicit systems in the critical case*, Academia Romana, 05.03.2015.
6. F. Panaite, *Hom-structures*, Al 8-lea Congres al Matematicienilor Romani, Iasi (Romania) Iunie 2015
7. F. Panaite, *Some properties of Brzezinski crossed products*, Ferrara Algebra Workshop, A Conference in Honour of Claudia Menini, Ferrara (Italia), Septembrie 2015

8. F. Panaite, *Pseudosymmetric braided categories*, The First Romanian-Turkish Mathematical Colloquium, Constanta (Romania), Octombrie 2015
9. F. Panaite, *BiHom-structures*, Algebra and Group Theory. A Conference in Honour of Prof. Otto Kegel, Mulhouse (France), Octombrie 2015
10. Vicențiu D. Rădulescu: Seminar of the University of Perugia, *A characterization property for a class of sublinear elliptic equations*, Perugia, 20 ianuarie 2015
11. Vicențiu D. Rădulescu: Seminar of the Department of Mathematics, King Abdulaziz University, *Entire solutions of nonlinear elliptic equations with indefinite weight*, Jeddah, 13 aprilie 2015
12. Vicențiu D. Rădulescu: Seminar of the Department of Mathematics, King Saud University, *Qualitative properties of nonlinear elliptic equations on fractal domains*, Riyadh, 7 mai 2015
13. Vicențiu D. Rădulescu: Séminaires "Analyse-E.D.P." de l'Université Toulouse 1, *Problèmes de bifurcation à exposant variable*, Toulouse, 16 octombrie 2015
14. Vicențiu D. Rădulescu: Séminaires de Mathématiques et de leurs Applications, Université de Pau et des Pays de l'Adour, *Effets de perturbation dans l'étude des problèmes elliptiques*, Pau, 22 octombrie 2015
15. Vicențiu D. Rădulescu: Equilibrium and Optimization Methodology in Finance and Economics, King Saud University, *Variational Principles for Equilibrium Problems and Applications to Inequality Problems and Fixed Point Theory*, Riyadh, 10 noiembrie 2015
16. Rareș Răsdeaconu, *Counting real rational curves on  $K3$  surfaces*, The Eighth Congress of Romanian Mathematicians, Iași, România, 26 iunie, 2015.
17. G.Pasa: Saffman-Taylor problem for a non-Newtonian fluid, comunicare prezentată la *The Eighth Congress of Romanian Mathematicians*, Iași, 26 iunie - 1 iulie 2015.
18. G.Pasa: Flow stability of a second order fluid displaced by air in a Hele-Shaw cell, comunicare prezentată la *The 12-th International Workshop on Differential Geometry and its Applications*, Universitatea de Petrol și Gaze Ploiești, 23 - 26 septembrie 2015.
19. G.Pasa: Hele-Shaw immiscible displacement with zero surface tension, comunicare prezentată la *The 36-th "Caius Iacob" Conference on Fluid Mechanics and its Technical Applications*, Institutul National de Cercetări Aero-Spațiale , București, 29 - 30 octombrie 2015.
20. N.C. Bonciocat, *From bicrossproducts of finite groups to primality conditions*, in: Special Session on Algebra in memory of Professor Șerban Basarab (in: Workshop for Young Researchers in Mathematics), Faculty of Mathematics and Computer Science, Ovidius University of Constanta, 22.05.2015.
21. N.C. Bonciocat, *Some applications of the resultant to factorization problems*, in: The Eighth Congress of Romanian Mathematicians, June 26 - July 1, 2015, Iasi, Romania

22. Anca Macinic, "(Multi)nets and monodromy", talk presented at the 8-th Congress of the Romanian Mathematicians, June 26 - July 1 2015, Iasi, Alexandru Ioan Cuza Univ.
23. Gheorghe Păun, *Some Research Directions in Membrane Computing*, Hubei Univ. of Science and Technology din Wuhan, China, mai 2015.
24. Gheorghe Păun, *Natural Computing. Achievements, Dreams, Limits*, Conf. Fundamentals of Informatics - FOI, Chişinău, august 2015
25. Gheorghe Păun, *Membrane Computing and Economics. A General View/Invitation*, Conf. Competitiveness and Performance in the EU Economy, Oradea, nov. 2015
26. Gheorghe Păun, *A Glimpse on Membrane Computing. After Seventeen Years*, IMAR, dec. 2015
27. Vasile Dragan, *Several control problems for linear systems modeled by singularly perturbed Ito differential equations*, The 8-th edition of ICTAMI - International Conference on Theory and Applications in Mathematics and Informatics, 17-20 September 2015 in Alba Iulia, Romania.
28. Vasile Dragan, *On the bounded and stabilizing solution of a generalized Riccati differential equation with periodic coefficients arising in connection with a zero sum linear quadratic stochastic differential game*, Congresul Matematicienilor Romani, 26 Iunie-1 Iulie 2015, Iasi, Romania
29. Liana David *Unfoldings for regular F-manifolds*, Workshop on Geometry and PDE's, Universitatea de Vest din Timisoara, 29-20 mai 2015.
30. Liana David *Regular F-manifolds: initial conditions and Frobenius metrics*, Research Seminar, Universitatea din Hamburg, 11 noiembrie 2015.
31. D. T. Vuza, M. Vladescu, *Multifunctional Automated Platform for Determining Spatial Characteristics of Optoelectronic Devices*, International Conference on Electronics, Computers and Artificial Intelligence - ECAI-2015, Bucuresti, iunie 2015
32. D. T. Vuza, M. Vladescu, *Automatic Characterization of the Angular Dependence of RFID Communications*, 2015 IEEE 21th International Symposium for Design and Technology in Electronic Packaging SIITME, Bucuresti, octombrie 2015
33. Arghir Dani Zarnescu, *Liquid crystal defects: between Oseen-Frank and Landau-de Gennes*, PDE Seminar, Centro de Giorgi, Italia, Iulie, 2015
34. Arghir Dani Zarnescu, *Thermodynamics and statistical constraints in Q-tensor models of nematic liquid crystals*, Mathematical Aspects of Hydrodynamics, Oberwolfach, Germania, August 2015
35. Arghir Dani Zarnescu, *Modelling and analysing the temperature and statistical constraints in Q-tensor models of nematic liquid crystals*, Joint Analysis and Dynamics Seminars, University of Surrey, UK, Octombrie 2015

36. Arghir Dani Zarnescu, *On the K13 problem in the Oseen-Frank theory of nematic liquid crystals*, Mathematics and Mechanics in the 22nd Century: Seven Decades and Counting..., Eugene,OR, SUA, Octombrie 2015
37. Arghir Dani Zarnescu, *Teoria Landau-de Gennes a cristalelor lichide*, Conferinta lunara, "Simion Stoilow" Institute, Romania, Ianuarie, 2015
38. Arghir Dani Zarnescu, *Thermodynamics, energetics and regularity for liquid crystal models*, Analysis Seminar, Heriot-Watt University, UK, Ianuarie, 2015
39. Arghir Dani Zarnescu, *Symmetry breaking and tensorial features in the Q-tensor theory of nematics*, Indam-ERC Workshop "Special materials in complex systems", Roma, Italia, Mai 2015
40. Arghir Dani Zarnescu, *Liquid crystal hydrodynamics: between Leslie-Ericksen and De Gennes*, Kacov, Cracovia, Republica Ceha, Mai, 2015
41. Arghir Dani Zarnescu, *Partial regularity and smooth topology-preserving approximations of rough domains*, The 8th Congress of Romanian Mathematicians, Iasi, Romania, Iunie 2015
42. Tudor Zamfirescu, *Discs held in cages*, Elgersburg, martie 2015.
43. Tudor Zamfirescu, *Connecting almost separated convex bodies*, Shijiazhuang, 30 septembrie 2015.
44. Tudor Zamfirescu, *Corps convexes égoïstes*, Mulhouse, 3 decembrie 2015.
45. Eugen Mihailescu, *Ergodic theory and dimension for a class of fractals*, Fractals and Related Fields III, POrquerolles, Cote d'Azur, France, Sep 2015.
46. Eugen Mihailescu, *On certain classes of fractals with foldings*, Millican Colloquium, University of North Texas, USA, March 2015.
47. Eugen Mihailescu, *Ergodic and metric properties of certain invariant measures on fractals*, International Congress of Romanian Mathematicians, Iasi, June 2015.
48. C. R. Popescu, *Resonance varieties and nilpotent Lie algebras*, Workshop for Young Researchers in Mathematics, 21 - 24 Mai, Universitatea Ovidius, Constanța, Romania
49. C. R. Popescu, *Flat connections and resonance varieties of rank larger than 1*, The Eighth Congress of Romanian Mathematicians, 26 Iunie - 1 Iulie, Iași, România
50. Cristian Sminchisescu: Universitatea din Heidelberg
51. Cristian Sminchisescu: ETH, Zurich
52. Cristian Sminchisescu: INRIA, Franta
53. Cristian Sminchisescu: Linköping, Suedia, pr. inv. *Annual Meeting of the Swedish Mathematical Society*

54. Ruxandra Stavre, *Optimization of the fluid-structure interaction problem*, The 36-th "Caius Iacob" Conference on Fluid Mechanics and its Technical Applications, Bucharest, October 29-30, 2015.
55. Lori Badea, *Global convergence rates of some multilevel methods for variational and quasi-variational inequalities*, 23th International Conference on Domain Decomposition Methods, ICC Jeju island, Korea, July 6-10, 2015 (<http://dd23.kaist.ac.kr>).
56. Lori Badea, *Multilevel methods for variational and quasi-variational inequalities and applications in mathematical finance*, "Angel Kanchev" University of Ruse, Bulgaria, May 14, 2015.
57. A. Zarojanu, *An introduction to Hilbert depth*, Institute of Mathematics and Computer Science of the Academy of Sciences of Moldova, 20.08.2014
58. A. Zarojanu, *On the Stanley Depth*, Alexandru Ioan Cuza University, Iasi, 30.06.2015
59. Nicolae Popa, *Abel-Schur Multipliers On Banach Spaces Of Infinite Matrices*, al 8-lea Congres al Matematicienilor Romani, Iasi, iunie 2015.
60. Liviu Paunescu, *On the Birkhoff - von Neumann theorem in type  $II_1$  setting*, Universitatea Viena, 12.05.2015.
61. Florin Nicolae, *L-Functions of Algebraic Number Fields*, Special Session On Algebra In The Memory Of Professor Serban Basarab, Faculty Of Mathematics And Computer Science, Ovidius University Of Constanta, 22nd May 2015.
62. Florin Nicolae, *Über die Bestimmung Algebraischer Zahlkörper durch L-Funktionen*, Oberseminar Computer Algebra und Zahlentheorie, Universität Paderborn, 12. November 2015.
63. Florin Belgun, *Structure of curves in conformal manifolds*, Conferinta anuala a DMV (Societatea Germana de Matematica), 24.09.2015
64. Dan Poliřevski, *The flow through fractured porous media along Beavers-Joseph interfaces*, The Eighth Congress of Romanian Mathematicians, Iasi, June 26 - July 1, 2015
65. Isabelle Gruais, Dan Poliřevski and Florentina-Alina Stănescu, *The effective permeability of fractured porous media*, The 36th "Caius Iacob" Conference on Fluid Mechanics and its Technical Applications, Bucharest, 29 - 30 October, 2015
66. M. Cipu, *What do we know about Diophantine quintuples?*, Seminar on Number Theory and Algebra, Department of Mathematics, University of Zagreb, 10th June 2015.
67. M. Cipu, *Recent advances in the study of Diophantine quintuples*, The Eighth Congress of Romanian Mathematicians Iași, 29th June 2015.
68. M. Cipu, *What do we know about Diophantine  $m$ -sets?*, The First Romanian-Turkish Mathematics Colloquim Constanța, 15th October 2015.
69. C. Anghel, *Quantum sheaf cohomology on surfaces of general type*, ICTAMI, 17-20 Septembrie 2015, Alba-Iulia.

70. C. Anghel, *Heegaard-Floer homology and cuspidal multiple planes*, Workshop for Young Researchers in Mathematics, 21-24 Mai 2015, Constanta.
71. Dan Timotin, *Schur coupling and other equivalence relations for operators on a Hilbert space*, Recent Advances in Operator Theory and Operator Algebras, Bangalore, 9–19 decembrie 2014.
72. Dan Timotin, *Schur coupling and other equivalence relations for operators on a Hilbert space*, Conference on Harmonic and Functional Analysis, Operator Theory and Applications, Bordeaux, 1–4 iunie 2015.
73. Dan Timotin, *Schur coupling and other equivalence relations for operators on a Hilbert space*, Recent Trends in Operator Theory and Function Theory, Lille, 8–12 iunie 2015.
74. Dan Timotin, *The solution to the Kadison-Singer problem*, The 14th International Conference on Mathematics and its Applications, Timișoara, 5–7 noiembrie 2015.
75. Andrei Sipoș, *Codensity and Stone spaces*, The Eighth Congress of Romanian Mathematicians, Iași, 26 iunie - 1 iulie 2015.
76. Andrei Sipoș, *Codensity and Stone spaces*, Logic Colloquium, Helsinki, 3-8 august 2015.
77. Alexandra Otiman, *Locally conformally symplectic bundles*, Timișoara, Universitatea de Vest, Workshop Geometry and Pde's, 29-30 mai 2015.
78. Alexandra Otiman, *Locally conformally symplectic bundles*, Bedlewo, Polonia, Workshop on almost hermitian and contact geometry, 18-24 octombrie 2015.
79. Sergiu Moroianu, *Boundaries of locally conformally flat  $4k$  manifolds*, Chișinău, 2–5 iulie, MITRE 2015.
80. Cristodor Ionescu, *About almost Cohen-Macaulay rings*, Special Session on Algebra, In memory of Professor Șerban Basarab, Ovidius University Constanta, 22 mai 2015.
81. G. Nenciu, *Perturbation theory for embedded eigenvalues: Rayleigh-Schrödinger expansion, spectral concentration and metastable states*, Septembrie 2015, UIC, SUA.
82. Pascu Mihai, *Spaces of smooth vectors alternate characterizations*, International Workshop on Operator Theory and Applications, Tbilisi, Georgia, 06.07.2015-10.07.2015.
83. Radu Purice, *The Peierls-Onsager substitution in the framework of magnetic  $\Psi DO$* , conferință invitată în cadrul Workshopului *Magnetic fields and semi-classical analysis*, organizat la Centre "Henri Lebesgue", Rennes France, May 19 - 22, 2015.
84. Cezar Joița: *Finite coverings of complex spaces by connected Stein open sets*, The Eighth Congress of Romanian Mathematicians, Iasi, 26 iunie - 1 iulie 2015.
85. Cezar Joița: *Covering complex spaces by finitely many connected Stein open sets*, Université Lille 1, 15 septembrie 2015
86. Cezar Joița: *On coverings of 1-convex surfaces*, Institut de Mathématiques de Jussieu, Paris, 8 septembrie 2015.



87. Mihai Prunescu, *Recurrent many-dimensional sequences over finite alphabets*, The Eighth Congress of Romanian Mathematicians, June 26 - July 1, 2015, Iasi, Romania.
88. Florin Ambro, *On representations by egyptian fractions*, The first Romanian-Turkish mathematics colloquium, Ovidius University, Constanta, October 15 2015
89. Florin Ambro, *An injectivity theorem*, Workshop Collapsing Calabi-Yau manifolds, SCGP, Stony Brook, September 3 2015
90. Florin Ambro, *On representations by egyptian fractions*, International Conference Mathematics & IT: Research and Education MITRE-2015, Moldova State University, July 2 2015
91. Mihaela Pilca, *Homogeneous Clifford Structures on Riemannian Manifolds*, Pacific Institute for the Mathematical Sciences, Vancouver, Canada, 29 iunie - 9 iulie 2015.
92. R. Pantilie, *(Pluri)harmonic morphisms and the Penrose–Ward transform*, Harmonic maps, biharmonic maps, harmonic morphisms and related topics, Universitatea din Cagliari, Italia, 10–12 iunie, 2015.
93. Paltin Ionescu, *Some special Fano manifolds*, Algebraic Geometry at Ferrara, in honour of Ph. Ellia, 15–18 Iunie 2015.
94. Radu Iordanescu, Florin F. Nichita, Ion M. Nichita, *Yang-Baxter Equations, Informatics and Unifying Theories*, INASE, Barcelona, 7-9 aprilie, 2015.
95. Radu Iordanescu, Florin F. Nichita, *Nonassociative structures, Yang-Baxter equations and applications* The Eighth Congress of Romanian Mathematicians, Iasi, Romania, 26 iunie - 1 iulie, 2015.
96. Florin F. Nichita, *On Jordan Algebras and Unification Theories*, The 12-Th International Workshop On Differential Geometry And Its Applications, Universitatea Petrol si Gaze din Ploiesti, septembrie 23 - 26, 2015.
97. Florin F. Nichita, *postere*, The 12-Th International Workshop On Differential Geometry And Its Applications, Universitatea Petrol si Gaze din Ploiesti, septembrie 23 - 26, 2015.
98. Stefan Papadima, *Arithmetic properties of homology jump loci*, Centro di Ricerca Matematica "Ennio De Giorgi" (Pisa, Italia), 25 feb 2015.
99. Stefan Papadima, *On the geometry and topology of partial configuration spaces of Riemann surfaces*, IMAR Bucharest, 16 mai 2015
100. Mihai Staic, *Operations on the Secondary Hochschild Cohomology*, The Eighth Congress of Romanian Mathematicians, Iași, June 26-July 1, 2015.
101. Daniel Matei, *Topology of complements*, Computational Geometric Topology in Arrangement Theory, ICERM, Brown University, SUA, 8 iulie 2015.
102. Daniel Matei, *Contact Geometry in Singularity Theory*, Seminarul de Geometrie si Topologie, Universitatea Luxembourg, iunie 2015.

103. Ionel Popescu: *Free functional inequalities on the circle* miniworkshop in free probability, Tokyo, July 13-17, 2015
104. Ionel Popescu: *From Girsanov to gradient estimates*, New Trends in Stochastic Analysis, Kyoto, July 6-10, 2015
105. Ionel Popescu: *Free functional inequalities on the circle* New developments in Optimal Transport, Geometry and Analysis, Bonn, Feb 24th, 2015
106. Cîmpean Iulian, *A new approach to existence of invariant measures for Markovian semi-groups*, Workshop for Young Researchers in Mathematics, 21-24 mai, 2015, Constanta, Romania.
107. Cîmpean Iulian, *A new approach to existence of invariant measures for Markovian semi-groups*, The Eighth Congress of the Romanian Mathematicians, 26 iunie – 1 iulie, 2015, Iasi, Romania.
108. Cîmpean Iulian, *Irreducible recurrence, ergodicity, and extremality of invariant measures for resolvents*, Bielefeld Stochastic Summer School, 12 august – 28 august, 2015, Bielefeld, Germany.
109. Cîmpean Iulian, *Irreducible recurrence, ergodicity, and extremality of invariant measures for resolvents*, Colloque Franco-Roumain en Thorie des Probabilits 30 octombrie – 1 noiembrie 2015, Bucuresti, Romania.
110. Adrian Diaconu: *Non-vanishing of quadratic twists of automorphic  $L$ -functions*. The Eighth Congress of Romanian Mathematicians, 26 Iunie – 1 Iulie, 2015, Iași.
111. Adrian Diaconu: *Multiple Dirichlet series*, Conferința: Third Bucharest Number Theory Day, IMAR, 3 August, 2015.
112. Cristian Cobeli, Alexandru Zaharescu, *On the dew line in circle packings*, The Eighth Congress of Romanian Mathematicians, June 26 – July 1, 2015, Iași, România.
113. Delia Ionescu-Kruse, *Short-wavelength instabilities of edge waves in stratified water*, Water wave dynamics, Viena, Austria, 1-5 iunie 2015.
114. Irina Nenciu, *On quantum and stochastic confinement*, Asymptotics in integrable systems, random matrices, random processes and universality (conference in the honor of Percy Deift's 70th birthday), CRM, Montreal, Canada, Iunie 2015.
115. Irina Nenciu, *On quantum and stochastic confinement*, 8th Congress of Romanian Mathematicians, Iași, Romania, Iulie 2015.
116. Corina Calinescu, *Vertex-algebraic structure of principal subspaces of certain  $A_{2n}^{(2)}$ -modules*, Representation Theory and Related Topics, University of Conncticut, May 11-12, 2015.
117. C.-N. Beli, *Octonion algebras having the same quaternion subalgebras*, ICTAMI, Alba Iulia, 17 septembrie 2015.
118. C.-N. Beli, *Properties of the symbols  $( , )$ ,  $[ , ]$  and  $(( , ))$* , Bucharest number theory day, la IMAR, pe 3 august 2015.

119. Lucian Beznea, *The Neumann problem: an equivalence with the Dirichlet problem and associated measure-valued branching processes*, Conference in Stochastic Analysis and Related Topics, Department of Mathematics, Purdue University, USA, May 20 - 22, 2015.
120. Lucian Beznea, *Measure-valued branching processes of Dirichlet and Neumann nonlinear boundary value problems*, Probability Seminar, Dept. of Math., Univ. of California at San Diego, La Jolla, USA, May 28, 2015.
121. Lucian Beznea, *An equivalence between the Dirichlet and the Neumann problem for the Laplace operator*, Bielefeld Stochastic Summer School, Bielefeld, Germany, August 21, 2015.
122. Ingrid Beltiță, *Fourier transforms on  $C^*$ -algebras of nilpotent Lie groups*, Representation theory of groups, quantum groups, and operator algebras, University of Copenhagen, Copenhagen, 1–5 iunie 2015.
123. Daniel Beltiță, *Open problems on linear Lie groups*, “Seminarium IM”, Universitatea din Białystok, Polonia, 14 octombrie 2015.
124. Daniel Beltiță, *Representations of infinite-dimensional linear Lie groups: some specific constructions and open problems*, Seminar Sophus Lie: “Lie Groups: Representations and Geometry”, Friedrich- Alexander-Universität Erlangen-Nürnberg, Department Mathematik, Emmy-Noether-Zentrum, Erlangen, Germania, 22–25 septembrie 2015.
125. Daniel Beltiță, *Quantization and  $C^*$ -algebras of nilpotent Lie groups*, “XXXIV Workshop on Geometric Methods in Physics”, Białowieża, Polonia, 28 iunie – 4 iulie 2015.
126. Daniel Beltiță, *Square integrability on some infinite-dimensional Lie groups*, “Workshop Classic and Stochastic Geometric Mechanics”, Centre Interfacultaire Bernoulli, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Elveția, 8–11 iunie 2015.
127. Daniel Beltiță, *L’espace des orbites coadjointes d’une algèbre de Lie nilpotente*, “Rencontre Algèbre Metz Mulhouse” (RAMM), Laboratoire de Mathématiques, Informatique et Applications, Université de Haute-Alsace, Mulhouse, Franța, 12 martie 2015.
128. Daniel Beltiță, *Operator valued Fourier transforms on nilpotent Lie groups*, “Infinite-dimensional Structures in Higher Geometry and Representation Theory”, Center for Mathematical Physics, Universität Hamburg, 16–20 februarie 2015.
129. Pasol, Vicentiu,  *$p$ -adic Analytic Functions from Recurrence Sequences*, The Eighth Congress of Romanian Mathematicians, 26 Iunie- 1 iulie 2015.
130. Alexandru Popa: *On the trace formula for Hecke operators*, Al 8-lea congres al matematicienilor romani, Iasi, June 26-July 1, 2015
131. Dorin Popescu: Smooth morphisms (Luminy).
132. Dorin Popescu: The smooth locus of a morphism (Luminy),
133. Dorin Popescu: Elkik’s theorem (Luminy),

134. Dorin Popescu: General Neron Desingularization in dimension 1 (Luminy),
135. Dorin Popescu: Artin approximation, versal deformations, and maximal Cohen-Macaulay modules (Luminy),
136. Dorin Popescu: On the regular local rings (Luminy),
137. Dorin Popescu: Around General Neron Desingularization (Bucharest),
138. Dorin Popescu: A theorem of Ploski's type (Constanta),
139. Dorin Popescu: A theorem of Ploski's type (Iasi, Congresul Matematicienilor Romani),
140. Dorin Popescu: Around General Neron Desingularization (Leuven).
141. Nicolae Manolache: *Equations and syzygies of Cohen-Macaulay multiple structures of degree 4 on a line in the projective space  $\mathbb{P}^3$* , Special Session On Algebra In memory of Professor Serban Basarab, Workshop for Young Researchers in Mathematics, Constanta, 21-24 mai 2015
142. Anca Capatina, *A quasistatic frictional contact problem with normal compliance and unilateral constraint*, The Eighth Congress of Romanian Mathematicians, Iasi, June, 2015.
143. T. Albu, *The conditions  $(C_i)$  in rings, modules, categories, and lattices*, "**The 7th China-Japan-Korea International Conference on Ring Theory**", Zhejiang University of Technology and Zhejiang University, Hangzhou, China, iulie 2015 – **Main Speaker**.
144. L. Ornea: *Pluricanonical metrics are Vaisman*, "Geometric structures on Riemannian manifolds", Bari, 25-27 iunie 2015.
145. L. Ornea: *Pluricanonical metrics are Vaisman*, workshopul PDEs and Geometry (Timisoara, iunie 2015)
146. L. Ornea: *Pluricanonical metrics are Vaisman*, Seminarul săptămînal de la Laboratorul de geometrie algebrică "Feodor Bogomolov", Higher School of Economics, Moscova, aprilie 2015;
147. L. Ornea: *Pluricanonical metrics are Vaisman*, Seminarul săptămînal de geometrie de la Université Libre de Bruxelles, 12 octombrie 2015
148. Viorel Nitica, Invariant distributions for parabolic flows in  $SL(2, C)$ , American Mathematical Society, Spring Sectional Meeting at Michigan State University, East Lansing, MI, March 2015
149. Constantin Năstăsescu, *Are graded semisimple algebras symmetric?*, Universitatea din Almerìa, mai 2015.
150. Constantin Năstăsescu, *Are graded semisimple algebras symmetric?*, The Eighth Congress of Romanian Mathematicians, Iași, Romania, June 26–July 1, 2015.
151. Constantin Năstăsescu, *Are graded semisimple algebras symmetric?*, Ferrara Algebra Workshop - A Conference in Honor of Professor Claudia Menini, 17–18 septembrie 2015.

152. Florin Rădulescu, *Berezin deformation Quantization and Number Theory*, 34 Workshop on Geometric Methods in Physics, Bialowieza, Polonia, 6-11 Iulie 2015.
153. Florin Rădulescu, *Akeman Ostrand Phenomena* Summer Workshop in Operator Algebras, Bucharest, IMAR, Iulie 2015
154. Florin Rădulescu, *Akeman Ostrand Phenomena* Workshop "Group Theory and Operator Algebra, Bucharest, IMAR, 29.09-3.10.2015
155. B. Udrea: Generalized q-gaussian von Neumann algebras with coefficients and their structural properties (invited talk), AMS Sectional Meeting, University of Memphis, Memphis, October 2015.
156. B. Udrea: Generalized q-gaussian von Neumann algebras with coefficients and their structural properties (invited speaker), ECOAS 2015, University of Iowa, Iowa City, October 2015.
157. Laurentiu Maxim, *Motivic infinite cyclic covers*, la conferinta Special Session on "Geometry, Topology and Combinatorics of Hyperplane Arrangements and Related Problems" – Zaragoza, Spain – 09/2015.
158. Laurentiu Maxim, *Motivic infinite cyclic covers*, la conferinta "Topological methods in Singularity Theory" – Edinburgh, UK – 07/2015.
159. Laurentiu Maxim, *Motivic infinite cyclic covers*, la conferinta Special Session on "Geometry and Topology of Differentiable Manifolds and Algebraic Varieties" at the Eighth Congress of Romanian Mathematicians – Iasi, Romania – 06-07/2015.
160. Laurentiu Maxim, *Motivic infinite cyclic covers*, la conferinta "Workshop for Young Researchers in Mathematics" – Constanta, Romania – 05/2015.
161. Laurentiu Maxim, *Characteristic classes of complex hypersurfaces*, la conferinta "IMPANGA 15" – Bedlewo, Poland – 04/2015.
162. Laurentiu Maxim, *Motivic infinite cyclic covers*, la conferinta "Local and Global Invariants of Singularities" – CIRM, Luminy, France – 02/2015.
163. Laura Elena Năstăsescu, *Are graded semisimple algebras symmetric?*, YRM 2015, Oxford, Anglia, 17-20 august 2015.
164. Ovidiu Preda, *Locally Stein open subsets in Normal Stein spaces*, The Eighth Congress of Romanian Mathematicians, Iași, 26 iunie - 1 iulie 2015.
165. Olivia Dumitrescu, *On the effective cone of  $\mathbb{P}^n$  blown-up at  $n + 3$  points*, Padua (Italia): Recent advances in Linear series and Newton-Okounkov bodies, Februarie 2015.
166. Olivia Dumitrescu, **Mini-curs:** (2 ore) *Topological recursion for Higgs bundles and Cohomological Field Theory*, Perimeter Institute - Waterloo (Canada): Advances in Perturbation Theory and Feynmann Amplitudes, Mai 2015.

167. Olivia Dumitrescu, *Topological recursion for Higgs bundles*, Lorentz Center: Geometric Invariants and Spectral Curves, Leiden (Olanda), Iunie 2015.
168. Olivia Dumitrescu, *From Cellular Graphs to TQFT*, AMS Summer Institute in Algebraic Geometry, Salt Lake City (SUA), Iulie 2015.
169. Olivia Dumitrescu, *Questioni di positivita per fibrati lineari in scoppamenti di spazi proiettivi in punti*, XX Congresso dell'unione matematica italiana, Siena (Italia), Settembre 2015.
170. Olivia Dumitrescu, *From Catalan numbers to Higgs bundles*, American Institute of Mathematics, San Jose (SUA): Current trends on spectral data for Higgs bundles, Settembre 2015.
171. Olivia Dumitrescu, **Mini-curs:** (3 ore) *Enumerative geometry, quantization of Higgs bundles and 2D-TQFT*, Osaka City University Advanced Mathematics Institute (Japonia): Quantization of Spectral Curves, Noiembrie 2015.
172. R. Diaconescu, *Structuring of Specification Modules*, (keynote talk) Workshop on Foundations of Informatics 2015, Chişină, Moldova, August 2015.
173. R. Diaconescu, *On the logical nature of the Nalanda tradition of Buddhism* (keynote talk) 1st World Congress on Logic and Religion, Joao Pessoa, Brazil, April 2015.
174. R. Diaconescu: *Composition of specification modules: recent developments* (via Skype), Workshop of the THALES project Algebraic modeling of topological and computational structures, National Technical University Athens, Greece, July 2015.
175. R. Diaconescu, *The Architecture of Logical Interpolation*, IMAR Monthly Conferences, February 2015.
176. L. Ignat, *Long-time behaviour for nonlocal problems*, 17 April, 2015, San Juan, University of Puerto Rico, USA
177. L. Ignat, *Dispersive properties for Schrödinger equations*, 24 April, 2015, San Juan, University of Puerto Rico, USA
178. L. Ignat, *Dispersive properties for Schrödinger equations*, The Eighth Congress of Romanian Mathematicians, June 26th-July 1st, 2015, Iasi, Romania
179. L. Ignat, *Dispersion property for Schrodinger equations*, 11 November 2015, IMAR, Bucharest
180. Marian Aprodu, *Cayley-Chow forms of K3 surfaces and Ulrich bundles*, Syzygies in Algebra and Geometry, 26-30 august 2015, Haeundae, Busan, Coreea de Sud.
181. Marian Aprodu, *Cayley-Chow forms of K3 surfaces and Ulrich bundles*, Moduli Spaces in Geometry, 26-30 octombrie 2015, CIRM Luminy, Franţa.
182. Barbu Berceanu: *De la alfabetul Artin la alfabetul Garside*, Iaşi, iunie 2015.
183. Sebastian Burciu, *On the On the depth of subgroups and semisimple Hopf subalgebras*, "Joint AMS & ESM & SPM Meeting", 10-13 June 2015, Porto, Portugal.

184. Sebastian Burciu, *On the irreducible modules of semisimple Drinfeld doubles and their fusion rules*, “New trends in Hopf algebras and tensor categories”, 2-5 June 2015, Brussels, Belgium.
185. Sebastian Burciu, *On the irreducible representations of Drinfeld doubles*, “The Eighth Congress of Romanian Mathematicians” June 26 - July 1, 2015, Iasi, Romania

## 8 Alte activități

### 8.1 Conducere granturi

- Ingrid Belțiță este director al proiectului *Analiză Armonică pe grupuri Lie rezolubile* cod proiect PN-II-RU-TE-2014-4-0370.
- Liviu Paunescu: Director de proiect al grantului de cooperare bilateral Austria- Romaina, Geometry and analysis of linear soficity, GALS, 2014-2015.
- Liviu Paunescu: Director de proiect al grantului nr. PN-II-RU-TE-2014-4-0669, CNCS - UEFISCDI, 2015-2017.
- Vicentiu Pasol: *Galois representations and Modular Forms* PN-II-RU-TE-2014-4-2077
- A. Zarnescu: Director al grantului Tinere Echipe- RO-PN-II-RU-TE-2014-4-0657 cu titlul ”*Simetrie, fizicalitate si aspecte de regularitate in teoria tensorilor Q a cristalelor lichide*” pentru perioada 2015-2017
- A. Zarnescu: Co-investigator pe grantul “*Liquid crystal defects in Landau-de Gennes Theory*”, grant Leverhulme, UK-2015-2017
- A. Zarnescu: Co-investigator pe grantul “*ModCompShock - Modelling and Computation for Shocks and Interfaces*”, EU ITN Network, 2015-2018
- Cristian Sminchisescu: Modele structurate pe scara larga pentru recunoasterea vizuala (1.8 ME)
- Cristian Sminchisescu: Metode pentru recunoasterea tri-dimensională a obiectelor (350 KE)
- Cristian Sminchisescu: Modelarea cu acuratete a persoanelor in video (250 KE / 550 KE)
- Cristian Sminchisescu: Interactiunea multi-modala om-robot pentru imbunatatirea imaginatiei la copiii cu autism (450 KE/4 ME)
- Laurentiu Leustean: Grantul IDEI PN-II-ID-PCE-2011-3-0383 (Octombrie 2011 - Octombrie 2016) Proof mining in metric analysis, geometric group theory and ergodic theory
- Marius Leordeanu: Director de proiect al grantului de IDEI, PN-II-ID-PCE-2012-4-0581.
- Sebastian Burciu: directorul grantului de tinere echipe PN-II-RU-TE -168/2012.
- Liviu Ignat: Proiect IDEI PN-II-ID-PCE-2011-3-0075

- Liviu Ignat: Proiect TE PN-II-RU-TE-2014-4-0007
- Bogdan Ichim: PN-II-RU-TE-2012-3-0161
- Dorin Popescu: PNII ID-PCE-2011-1023 al Ministerului Educatiei si Cercetarii
- Marian Aprodu: CNCS Grant PN-II-PCE-2011-3-0288
- Dorin Cheptea: Grant CNCS-UEFISCDI, proiect number PN-II-RU-TE-2012-3-0492.
- Dan Tiba: Grant 0211/2011, CNCS Romania
- R. Diaconescu *Universal logic methods for computer science*, PN-II-ID-PCE-2011-3-0439, finanțat de UEFISCDI.
- F. Rădulescu: Algebre de Operatori si aplicatii in Teoria Numerelor, Idei 2012, PN-II-ID-PCE-2012-4-0201
- Mihai Mihailescu: Variable Exponent Analysis: Partial Differential Equations and Calculus of Variations (CNCSIS-UEFISCSU, proiect number PN-II-ID-PCE-2012-4-0021).
- Daniel Belțiță este director al proiectului *Calcul operatorial pentru reprezentări de grupuri Lie, cu aplicații la ecuații cu derivate parțiale si fizica cuantică*, Programul “Idei”, cod proiect: PN-II-ID-PCE-2011-3-0131.
- Dan Timotin este directorul proiectului *Teoria operatorilor multidimensională. Spații cu nucleu reproducător, funcții necomutative, probleme de momente și rezultate de dilatare generalizată*, cod PN-II-ID-PCE-2011-3-0119.
- Cristian Sminchisescu: Metode pentru recunoasterea tri-dimensională a obiectelor (350 KE)
- T. Zamfirescu: director de proiect, CNCS - UEFISCDI - proiect PN-II-ID-PCE-2911-3-0533
- Vasile Brinzanescu: Director de grant PN-II-ID-PCE-2012-4-0156.
- Liana David: director al grantului CNCS “Structuri hermitiene si cuaternionice pe varietati si aplicatii” (codul grantului: PN-II-ID-PCE-2011-3-0362).
- Dumitru Stamate: Director al grantului PN-II-RU-PD-2012-3-0656, contract nr. 7/24.04.2013, finanțat de UEFISCDI, la IMAR, in perioada 1 mai 2013 - 31 octombrie 2015 (30 luni).
- Mihnea Colțoiu: director grant CNCS, PN-II-ID-PCE-2011-3-0269.
- O. Dumitrescu: *2015-2016 Research Grant* in Max Planck Institute for Mathematics.
- L. Maxim: *Singular Spaces in Geometry and Topology*, cercetare, 09/2013 – 08/2016, National Science Foundation (USA).
- L. Maxim: *Singular Spaces in Geometry and Topology*, cercetare, 2014 – 2016, National Security Agency (NSA).



- L. Maxim: *Stratified spaces in geometric and computational topology and physics*, conferinta, 2015, National Science Foundation (USA).
- E. Mihailescu: Project Co-Director, *Thermodynamical Formalism and Applications*, Grant Laboratoire Européen Associé Franco-Roumain MathMode.
- E. Mihailescu: Research grant, Univ North Texas, USA, March 2015.
- Corina Calinescu: Principal investigator al grantului "Collaboration Grants for Mathematicians", # 318810, Simons Foundation, 2014-2019.
- Corina Calinescu: Principal investigator al PSC-CUNY grant TRADA-46-335, #68211-00 46
- Irina Nenciu: *CAREER: Long-time asymptotics of completely integrable systems with connections to random matrices and partial differential equations (DMS-1150427)*, grant de cercetare, 2012–2017, \$500000, National Science Foundation, USA.
- Irina Nenciu: *Midwest Partial Differential Equations Seminar (DMS-1216549)*, grant pentru organizarea unei conferinte bianuale, 2012–2016, \$48000, National Science Foundation, USA.
- Irina Nenciu: *Midwest Partial Differential Equations Seminar (DMS-11465011)*, grant pentru organizarea unei conferinte bianuale, 2015–2018, \$48000, National Science Foundation, USA.
- Rareș Rădeanu: "Deformation techniques in real enumerative geometry and Kähler geometry" din partea "Simons Foundation", SUA (Award Number: 281266). Este un grant de cercetare pe o perioadă de 5 ani, și care a început în 2013.
- P. Stanica: *Decentralized distributed real-time sensing for spectrum characterization in multi-band, multi-user scenarios*, Information Dominance-Dahlgren.
- P. Stanica: *ONR-Global Visiting Scientist Program Research Grant*, NPS and IIT-Roorkee, India.
- P. Stanica: *US-Slovenia cooperative grant* (with Prof. Enes Pasalic).

## 8.2 Conducere doctorate

- Dan Tiba, Doctorand Roxana Nicolai (din 2012), IMAR
- Nicolae Popa - Doctorand: Roberto Fernandez, aflat în faza de a-si redacta teza.
- Radu Purice - Doctorand Alexandru Mustăța - Integrale Feynman si ecuatii cu derivate partiale pe varietati Riemann; 2015-2018.
- Mihnea Coltoiu - Doctorand: Ovidiu Preda.
- M. Vajaitu: drd (IMAR) Cosmin-Constantin Nițu, în stadiul de elaborare al tezei.
- Laurentiu Leustean: Andrei Sipos

- Cristian Sminchisescu are 6 doctoranzi.
- Laurentiu Maxim
  - Yun Su, anul VII, UW-Madison
  - Kai Ho Wong, anul VII, UW-Madison
  - Eva Elduque, anul II, UW-Madison
  - Yongqian Liu, 2015 Ph.D., USTC (Hefei, China)
- L. Ornea: Alexandra Otiman, înmatriculată în octombrie 2014, la Școala doctorală de Matematică a Universității din București.
- L. Ornea: Miron Stanciu, înmatriculat în octombrie 2015, la Școala doctorală de Matematică a Universității din București.
- I. Nenciu: Deniz Bilman, doctorat obținut în August 2015, Department of Mathematics, University of Illinois at Chicago (începând din Septembrie 2015, postdoc la University of Michigan, Ann Arbor).
- A. Zarnescu: Conducator de doctorat al studentului Stuart Day (2013-) la Universitatea Sussex, UK.
- In prezent, Vicențiu Rădulescu are 4 doctoranzi
- P. Stanica: Thor Martinsen, 2013–
- P. Stanica: Spyridon Pollatos, 2013–

### 8.3 Membru în colective editoriale

- Vasile Brinzanescu: Editor sef la: Math. Rep. si Revue Roumaine Math. Pures Appl.
- Vasile Brinzanescu: Editor la: Proc. Romanian Academy, An. St. Univ Ovidius Constanta, Bull. SSMR, Serdica Math. J., Bull. Univ Pol.Bucuresti
- Dan Tiba, Series co-editor "Mathematics and its Applications", Annals of ARS, Bucharest
- Dan Tiba, member of the Editorial Board of "Scientific Bulletin, ser. A" (Bucharest)
- Dan Tiba, member of the Editorial Board of "International Journal of Differential Equations", Hindawi
- E. Mihailescu - Editorial Board Member, Discrete and Continuous Dynamical Systems-series S, 2014 ISI Impact Factor: 0.6.
- V. Dragan: International Journal of Innovative Computing Information and Control (IJICIC) din 2005
- V. Dragan: ICIC - Express Letters din 2007
- V. Dragan: IET Control Theory and Applications din 2015

- T. Zamfirescu: Carpathian J. Math., Bull. Math. Soc. Sci. Math. Roumanie, Analele Univ. Craiova
- Lori Badea: Annals of the A. R. S., Series on Mathematics and its Applications
- Dan Timotin: Journal of Operator Theory.
- Dan Timotin: Revue Roumaine de Mathématiques Pures et Appliquées.
- Dan Timotin: Mathematical reports.
- Dan Timotin: Analele Științifice ale Universității “Alexandru Ioan Cuza” din Iași, Matematică.
- Mihnea Coltoiu: Proc. Romanian Academy, Acta Universitatis Apulensis (Alba Iulia)
- Dorin Popescu - Membru în colectivele editoriale: Bulletin Soc. de Stinte Mat. din Romania, Analele Univ. Buc.
- Paltin Ionescu: Editor Sef al Revistei Annali dell’Università di Ferrara, editata de Springer
- Paltin Ionescu: Editor al revistei Analele Universității din București
- Stefan Papadima: Revue Roumaine de Mathématiques Pures et Appliquées
- Stefan Papadima: Mathematical Reports
- Lucian Beznea:
  1. *Ann. Univ. București*, Editura Univ. din București
  2. *Advances in Pure and Applied Mathematics*, De Gruyter
  3. *Revue Roumaine Math. Pures Appl., Math. Reports*, Editura Academiei Romane
  4. *Proc. Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science*, Editura Academiei Romane
- Daniel Beltiță este membru in comitetul editorial al revistei Analele Științifice ale Universității „Al.I.Cuza” din Iași —Matematică (<http://www.math.uaic.ro/~annalsmath/>).
- T. Albu: Revista “*Gazeta Matematică*”, din 1980.
- T. Albu: Revista “*Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie*”, din 2004.
- T. Albu: Revista “*Communications in Algebra*”, Taylor & Francis Group, Philadelphia (fost Marcel Dekker, Inc., New York), din 2005.
- T. Albu: Revista “*Analele Științifice ale Universității Ovidius Constanța*”, din 2012.
- Revista “*Turkish Journal of Mathematics*”, din 2015.
- L.Ornea: Mathematical Reports,
- L.Ornea: Revue roumaine de mathématiques pures et appliquées,
- L.Ornea: Bulletin mathématique de la SSMR,

- L.Ornea: Annals of the University of Buharest (Math. series)
- C. Nastasescu: Analele Universității din București, Seria Matematică.
- C. Nastasescu: Revue Roumaine de Mathématiques Pures et Appliquées.
- C. Nastasescu: Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie.
- C. Nastasescu: Analele Științifice ale Universității ”Ovidius” din Constanța, Seria Matematică.
- C. Nastasescu: Analele Universității din Craiova, Seria Matematică - Informatică.
- C. Nastasescu: Mathematica (Cluj).
- Florin Radulescu: Journal of Operator Theory
- Razvan Diaconescu: *Studies in Universal Logic* book series at Springer Basel, Switzerland.
- Razvan Diaconescu: *International Journal of Mathematics and Mathematical Sciences* at Hindawi Publishing Corporation, USA.
- Razvan Diaconescu: *International Scholarly Research Notices* at Hindawi Publishing Corporation, USA.
- Marian Aprodu: Revue Roumaine Math. Pures Appl. și Math. Reports
- Mihai Cipu: Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie, Gazeta Matematică, Seria A
- Calin Popescu: *Gazeta Matematică — Seria A si Romanian Mathematical Competitions*
- Florin Nichita: Axioms, MDPI, Basel, Elvetia (ISSN 2075-1680) – membru in comitetul editorial.
- Vlad Timofte: Editor Asociat, *Australian Journal of Mathematical Analysis and Applications (AJMAA)*, Perioada 2005-prezent.
- Marius Leordeanu - Membru in comitetul stiintific al urmatoarelor conferinte: International Conference on Computer Vision (Categorie A+). International Conference on Computer Vision and Pattern Recognition (Categorie A+), AAI International Conference on Artificial Intelligence (Categorie A+), European Conference on Computer Vision (Categorie A), British Machine Vision Conference (Categorie B), Asian Conference on Computer Vision (Categorie B).
- Vicențiu Rădulescu: Editor of the Mathematics In Science And Engineering Book Series, Academic Press (an imprint of Elsevier)
- Vicențiu Rădulescu: Editor in Chief of *Advances in Nonlinear Analysis* (Walter de Gruyter)
- Vicențiu Rădulescu: Associate Editor of *Nonlinear Analysis: Theory, Methods & Applications*

- Vicențiu Rădulescu: Associate Editor of the *Journal of Mathematical Analysis and Applications*
- Vicențiu Rădulescu: Member of the Editorial Board of *Complex Variables and Elliptic Equations*
- Vicențiu Rădulescu: Associate Editor of *Boundary Value Problems*
- Vicențiu Rădulescu: Associate Editor of the *Electronic Journal of Differential Equations*
- Vicențiu Rădulescu: Acquisition Editor, *de Gruyter–Versita Book Publishing Program in Mathematics*
- Vicențiu Rădulescu: Editor of *Advances in Pure and Applied Mathematics* (Walter de Gruyter)
- Vicențiu Rădulescu: Associate Editor of *Discrete and Continuous Dynamical Systems, Series S* (American Institute of Mathematical Sciences)
- Vicențiu Rădulescu: Member of the Editorial Committee of *Opuscula Mathematica* (Krakow University)
- Vicențiu Rădulescu: Member of the Editorial Advisory Board of the *Journal of Advanced Mathematical Studies*
- Vicențiu Rădulescu: Member of the Editorial Board of “MATHlics Research Paper Series Applied MATHematics Journal for EconomICS” (edited by MEDAlics–Research Centre on Mediterranean Relations)
- Vicențiu Rădulescu: Member of the Editorial Board of *Journal of Numerical Analysis and Approximation Theory* (Romanian Academy)
- Vicențiu Rădulescu: Honorary Editor of the *International Journal of Mathematical Analysis* (Hikari)
- Vicențiu Rădulescu: Member of the Editorial Board of *Ann. St. Univ. Ovidius Constanta*
- Vicențiu Rădulescu: Editor in Chief of the *Annals of the University of Craiova - Mathematics and Computer Science Series*
- Cristian Sminchisescu: Associate Editor (IEEE Transaction on Pattern Analysis and Machine Intelligence, IF: 4.795)
- Cristian Sminchisescu: Area Chair IEEE International Conference on Computer Vision, ICCV 2015
- Cristian Sminchisescu: Program Committee: Neural Information Processing Systems NIPS 2015; IEEE Conference on Computer Vision and Pattern Recognition CVPR 2015; International Conference on Machine Learning, ICML 2016.
- P. Stanica: *Discrete Applied Mathematics* (Associate Editor, 2015–present)

- P. Stanica: *European Journal of Pure and Applied Mathematics* (Associate Editor 2007–present)
- P. Stanica: *Journal of Discrete Mathematics* (Associate Editor 2012–present)
- P. Stanica: Member of Board of Directors – Fibonacci Association

## 8.4 Lucrări acceptate la publicat

1. L. Daus, F. Panaite, *A new way to iterate Brzezinski crossed products*, acceptata pentru publicare in **Colloq. Math.**
2. J. Dello, F. Panaite, F. Van Oystaeyen, Y. Zhang, *Structure theorems for bicomodule algebras over quasi-Hopf algebras, weak Hopf algebras and braided Hopf algebras*, acceptata pentru publicare in **Comm. Algebra**
3. G.Pasa: Thickening Effect of Variable Surface Tension in Landau-Levich Problem, acceptat la *Mathematical Reports (Buc.)*, sept. 2015.
4. N.C. Bonciocat, *An irreducibility criterion for the sum of two relatively prime polynomials*, acceptată la *Functiones et Approximatio Commentarii Mathematici*, 8 pag.
5. L. Paun, Gh. Păun, *A note on purely catalytic P systems*, acceptata la *International Journal of Natural Computing*
6. L. Pan, Gh. Păun, B. Song *Flat maximal parallelism in P systems with promoters*, acceptata la *Theoretical Computer Science*
7. Gh. Păun *Membrane computing and economics. A general view*, acceptata la *Intern. J. of Computers, Communications, and Control* (February 2016), pag. 105 – 112
8. Vasile Dragan, Samir Aberkane and Ioan-Lucian Popa, *Optimal H2 Filtering for Periodic Linear Stochastic Systems with Multiplicative White Noise Perturbations and Sampled Measurements*, acceptata la *Journal of the Franklin Institute*, pag. 23 de pagini
9. Liana David, *On cotangent manifolds, complex structures and generalized geometry*, acceptata la *Annales de l'Institut Fourier*, (raportul pozitiv al referentului primit in 2014; acceptata in 2015; publicata online in 25 septembrie 2015), 28 pagini.
10. M. Leordeanu, A. Radu, S. Baluja and R. Sukthankar, *Labeling the Features Not the Samples: Efficient Video Classification with Minimal Supervision*, AAAI Conference on Artificial Intelligence (Category A+), accepted for publication at AAAI-2016.
11. R. Ignat, L. Nguyen, V. Slastikov, A. Zarnescu *Instability of point defects in a two-dimensional nematic liquid crystal model*, acceptata la *Ann. Inst. H. Poincaré*
12. G. di Fratta, J.M. Robbins, V. Slastikov, A.Zarnescu, *Half-integer point defects in the Q-tensor theory of nematic liquid crystals*, acceptata la *J. Non. Sci.*
13. M. Cipu, A. Filipin, Y. Fujita: *Bounds for Diophantine quintuples II*, acceptată la *Publ. Math. Debrecen*.

14. M. Cipu, T. S. Trudgian: *Searching for Diophantine quintuples*, acceptată la Acta Arith.
15. Dan Timotin: *The solution to the Kadison-Singer Conjecture: yet another presentation*, minicurs acceptat la volumul de Proceedings al conferinței Recent Advances in Operator Theory and Operator Algebras, Bangalore, 9–19 decembrie 2014
16. C. Ionescu *Flat local morphisms of rings with prescribed depth and dimension*, acceptata la An. St. Univ. Ovidius, pag. 3
17. C. Anghel, N. Buruiana, *On large families of bundles over algebraic surfaces*, **Journal of Geometry and Physics** accepted (2015), doi:10.1016/j.geomphys.2015.10.013
18. Mihnea Colțoiu, Cezar Joița: *On Runge-curved domains in Stein spaces*, acceptata la Annali della Scuola Normale Superiore di Pisa.
19. Mihai Prunescu *About a surprizing computer program of Matthias Müller*, Convexity and Discrete Geometry Including Graph Theory, *Springer Proceedings in Mathematics and Statistics*, Editors: Karim Alexander Adiprasito, Imre Barany, Costin Vilcu
20. A. Dimca, D. Popescu, *Hilbert series and Lefschetz properties of dimension one almost complete intersections*, a fost acceptata la **Communications in Alg.**,
21. D. Popescu, *Stanley depth on five generated, squarefree, monomial ideals*, va apare in **Bull. Math. Soc. Sci. Math. Roumanie**, **59(107)**, (2016), no 1,
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23. E. Marinoiu, D. Papava, C. Sminchisescu. *Pictorial Human Spaces: A Computational Study on the Human Perception of 3D Articulated Poses*, **International Journal of Computer Vision**, **IF: 3.533** (2016)
24. Ambro, F.: *Cyclic covers and toroidal embeddings*, acceptata la Eur. J. Math. (2015), 27 pag.
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27. Mihai D. Staic, *Secondary Hochschild Cohomology*, acceptată la Algebra and Representation Theory
28. Ionescu-Kruse Delia: *Instability of equatorially trapped waves in stratified water*, acceptata la **Annali di Matematica Pura ed Applicata**, pag. 1–15.
29. C. Făciu, *Modelling the Portevin - Le Chatelier effect. A study on plastic instabilities and pattern formation*, în **Multiscale modelling in sheet metal forming**, editor: D. Banabic, acceptată în volumul colectiv din ESAFORM Book series on Material Forming ISSN: 2198-9907, editura Springer (2015), pag. 49

30. C. Anghel, I. Coandă, N. Manolache, *Globally generated vector bundles with small  $c_1$  on projective spaces*, acceptată la *Memoirs of the AMS*,
31. C. Calinescu, A. Milas, M. Penn, *Vertex-algebraic structure of principal subspaces of basic  $A_{2n}^{(2)}$ -modules*, acceptata in *Journal of Pure and Applied Algebra*, 2015.
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33. C.-N. Beli, P. Gille, T.-Y. Lee *Maximal tori of algebraic groups of type  $G_2$* , arXiv:1411.6808, acceptata la *Pacific Journal of Mathematics*.
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35. I. Belțiță, R. Bunoiu: *Inverse scattering for the 1-D Helmholtz equation*, acceptată la *Complex Analysis Op. Theory*.
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38. D. Belțiță, K.-H. Neeb, *Nonlinear completely positive maps and dilation theory for real involutive algebras*, acceptata la **Integral Equations Operator Theory**, 46 pagini .
39. D. Belțiță, S. Patnaik, G. Weiss, *Cartan subalgebras of operator ideals*, acceptata la **Indiana University Mathematics Journal**, 31 pagini.
40. H. Charalambous, A. Thoma, M. Vladioiu - *Binomial fibers and indispensable binomials*, acceptat la **Journal of Symbolic Computation** 74 578-591, 2016.
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48. L. Maxim: *Intersection spaces, perverse sheaves and string theory*, acceptata la Journal of Singularities.
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51. Mariana Dumitru, Daniela Joița, Laura Năstăsescu, *Canonical resolution relative to a generator and respectively to a strong cogenerator. Applications to calculus of functorial morphisms*, acceptată la, Communications in Algebra
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57. Ignat Ioan Liviu, Beli Constantin, Zuazua Enrique, *Dispersion for 1-D Schrödinger and wave equations with BV coefficients*, acceptata la Annales IHP.
58. Marian Aprodu, Marius Marchitan: *Prioritary omalous bundles on Hirzebruch surfaces*, acceptata Journal of Geometry and Physics, pag. 9
59. Maria Chiara Brambilla, Olivia Dumitrescu si Elisa Postinghel *Linear systems of  $\mathbb{P}^3$  with nine base points*, acceptata la revista Annali di Matematica Pura ed Applicata.
60. Maria Chiara Brambilla, Olivia Dumitrescu si Elisa Postinghel *On the effective cone of  $\mathbb{P}^n$  blown-up at  $n + 3$  points*, acceptata la revista Experimental Mathematics.
61. Edoardo Ballico, Olivia Dumitrescu si Elisa Postinghel *On Segre's bound for fat points in  $\mathbb{P}^n$* , acceptata la revista Journal of Pure and Applied Algebra.

62. B. Alleche, Vicențiu Rădulescu, *Set-valued equilibrium problems with applications to Browder variational inclusions and to fixed point theory*, *Nonlinear Analysis: Real World Applications* **28** (2016), 251-268
63. Vicențiu Rădulescu, M. Xiang, B. Zhang, *Existence of solutions for perturbed fractional  $p$ -Laplacian equations*, *Journal of Differential Equations* **260** (2016), 1392-1413
64. N.S. Papageorgiou, Vicențiu Rădulescu, *Robin problems with indefinite, unbounded potential and reaction of arbitrary growth*, acceptata la *Revista Matematica Complutense*, pag. 29
65. G. Afrouzi, M. Mirzapour, Vicențiu Rădulescu, *Qualitative analysis of solutions for a class of anisotropic elliptic equations with variable exponent*, acceptata la *Proceedings of the Edinburgh Mathematical Society*, pag. 17
66. R.alsaedi, H. Maagli, Vicențiu Rădulescu, N. Zeddini, *Entire bounded solutions versus fixed points for nonlinear elliptic equations with indefinite weight*, acceptata la *Fixed Point Theory*, pag. 12
67. N.S. Papageorgiou, Vicențiu Rădulescu, *Nonlinear elliptic problems with superlinear reaction and parametric concave boundary condition*, acceptata la *Israel Journal of Mathematics*, pag. 21
68. G. Afrouzi, Vicențiu Rădulescu, S. Shokooh, *Multiple solutions of Neumann problems: an Orlicz-Sobolev space setting*, acceptata la *Bulletin of the Malaysian Mathematical Sciences Society*, pag. 22
69. N.S. Papageorgiou, Vicențiu Rădulescu, *Coercive and noncoercive nonlinear Neumann problems with indefinite potential*, acceptata la *Forum Mathematicum*, pag. 27
70. G. Molica Bisci, Vicențiu Rădulescu, R. Servadei, *Competition phenomena for elliptic equations involving a general operator in divergence form*, acceptata la *Analysis and Applications*, pag. 32
71. N.S. Papageorgiou, Vicențiu Rădulescu, *Multiplicity theorems for nonlinear nonhomogeneous Robin problems*, acceptata la *Revista Matematica Iberoamericana*, pag. 31
72. N.S. Papageorgiou, Vicențiu Rădulescu, *Multiplicity theorems for resonant and superlinear nonhomogeneous elliptic equations*, acceptata la *Topological Methods in Nonlinear Analysis*, pag. 40
73. N.S. Papageorgiou, Vicențiu Rădulescu, *Robin problems with indefinite and unbounded potential, resonant at  $-\infty$ , superlinear at  $\infty$* , acceptata la *Tohoku Mathematical Journal*, pag. 21
74. N. Labropoulos, Vicențiu Rădulescu, *On the best constants in Sobolev inequalities on the solid torus in the limit case  $p = 1$* , acceptata la *Advances in Nonlinear Analysis*, pag. 37
75. K. Atchonouglo, Vicențiu Rădulescu, C. Vallée, *New variational principles for solving extended Dirichlet-Neumann problems*, acceptata la *Journal of Elasticity*, pag. 18

76. B. Alleche, Vicențiu Rădulescu, *Solutions and approximate solutions of quasi-equilibrium problems in Banach spaces*, acceptata la *Journal of Optimization Theory and Applications*, pag. 19.
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78. C. Etherington, M. Anderson, E. Bach, J. Butler, P. Stănică, *A parallel approach in computing correlation immunity in six variables*, accepted in **International Journal of Foundations of Computer Science**, 2015.
79. T.W. Cusick, P. Stănică, *Counting equivalence classes for monomial rotation symmetric Boolean functions with prime dimension*, accepted in **Cryptography and Communications (Discrete Structures, Boolean Functions and Sequences)**, 2015.
80. F. Zhang, S. Xia, P. Stănică, Y. Zhou, *Further results on constructions of generalized bent Boolean functions, progress*, accepted in **Science China**.
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## 8.5 Preprinturi

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2. L. Daus, F. Panaite, *A new way to iterate Brzezinski crossed products*, arXiv:math.QA/1502.00031
3. F. Panaite, F. Van Oystaeyen, *Twisted algebras, twisted bialgebras and Rota-Baxter type operators*, arXiv:math.QA/1502.05327
4. G. Graziani, A. Makhlof, C. Menini, F. Panaite, *BiHom-associative algebras, BiHom-Lie algebras and BiHom-bialgebras*, arXiv:math.RA/1505.00469
5. Eugen Mihailescu and Mariusz Urbanski, *Random countable iterated functions systems with overlaps*.
6. Eugen Mihailescu, *Dimension formulas for measures*.
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8. L. David, C Hertling, *Hermitian metrics on F-manifolds*, arxiv:1511.06637/2015, 32 pagini.
9. L. David, C. Hertling, *Regular F-manifolds: initial conditions and Frobenius metrics*, arxiv:1411.4553/2015, 34 pagini.
10. A. Goyal and M. Leordeanu, *Stories in the Eye: Contextual Visual Interactions for Efficient Video to Language Translation*, arxiv preprint arXiv:1511.06674, 2015. Submitted to International Conference on Learning Representations, Puerto Rico, 2016.

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12. Radu Ignat, Luc Nguyen, Valeriy Slastikov, Arghir Zarnescu *Instability of point defects in a two-dimensional nematic liquid crystal model* preprint arXiv:1503.03670
13. Florin Nicolae: *On the Semigroup of Artin's L-functions holomorphic at  $s_0$ . II*, arXiv:1505.03330, <http://arxiv.org/abs/1505.03330>
14. Jürgen Klüners, Florin Nicolae, *On The Determination Of Number Fields By Artin L-Functions* arXiv:1509.06883, <http://arxiv.org/abs/1509.06883>
15. Kharlamov, Viatcheslav, Răşdeaconu, Rareş *Qualitative aspects of counting real rational curves on real K3 surfaces*, arXiv:1506.03050 [math.AG]
16. Isabelle Gruais and Dan Poliřevski: *Heat transfer models for two-component media with interfacial jump*, Prépublication Institut de Recherche Mathématique de Rennes, 15-40/2015, 1-18
17. M. Cipu, T. S. Trudgian: *Searching for Diophantine quintuples*, preprint <http://front.math.ucdavis.edu/1508.02106>, 15 pag.
18. Cristian Anghel *Quantum Sheaf Cohomology on surfaces of general type I: construction of stable omalous bundles*, preprint arXiv:1509.05031 [math.AG] , 8 pag.
19. C. Anghel, N. Buruiana, *On large families of bundles over algebraic surfaces* , preprint arXiv:1504.01337 [math.AG] , 7 pag.
20. C. Ionescu, O. Vantzoz, C. Sminchisescu: *Training Deep Networks with Structured Layers by Matrix Backpropagation*, preprint arXiv:1509.07838/2015
21. V. Olaru, M. Florea, C. Sminchisescu: *A Parallel Framework for Parametric Maximum Flow Problems in Image Segmentation*, preprint arXiv:1509.06004 /2015
22. Dan Timotin: *The solution to the Kadison-Singer Conjecture: yet another presentation*, arXiv:1501.00464, 24 pag.
23. Andrei Sipoş, *Ultraproducts and uniform rates of asymptotic regularity and metastability*.
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26. Sergiu Moroianu: *Convexity of the renormalized volume of hyperbolic 3-manifolds*, preprint arXiv:1503.07981.
27. Colin Guillarmou, Sergiu Moroianu, Frédéric Rochon: *Renormalized volume on the Teichmüller space of punctured surfaces*, preprint arXiv:1503.07981.
28. Sergiu Moroianu: *Boundaries of locally conformally flat manifolds in dimensions  $4k$* , preprint arXiv:1506.05968.

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## 8.6 Cooperări științifice

- Radu Purice a continuat coordonarea împreună cu Doamna Genevieve Raugel (Universitatea Paris Sud) a **Laboratorului European Asociat CNRS Mathematique et Modelisation** (<http://www.imar.ro/math-mode/>).
- Radu Purice s-a ocupat de aderarea IMAR ca membru asociat la Agenția Universitară a Francofoniei (realizată în Mai 2015).
- Delia Ionescu: Poziție de cercetător invitat 05/2015-07/2015: Facultatea de Matematică, University of Vienna, Austria.
- Delia Ionescu: Membru al European ERC Advanced Grant project no. 267116/(2011-2016), "Nonlinear studies of water flows with vorticity" (NWFV), Director de proiect: Prof. Dr. A. Constantin, University of Vienna, Austria.
- Delia Ionescu: Proiectul *A variational approach to water waves in shallow waters* în cadrul LEA Math-Mode  
Partener: LAMA, UMR 5127 CNRS, Université Savoie Mont Blanc, Franța.
- Stefa Papadima a fost Invited Speaker al sesiunii *Algebraic topology, geometric and combinatorial group theory*, organizată de Centro di Ricerca Matematica "Ennio De Giorgi" (Pisa, Italia) în perioada 9-28 februarie 2015.
- O. Dumitrescu: *Research in Pair Grant* (4 săptămâni) cu Elisa Postinghel la Centro Internazionale per la Ricerca Matematica, Trento, Ianuarie - Februarie 2015.
- O. Dumitrescu: *Research in Pair Grant* (1 săptămână) cu Motohiko Mulase la Osaka City University Advanced Mathematics Institute, Octombrie 2015.
- Cezar Joita: proiectul *Bifurcation Sets And Holomorphic Arcs* în cadrul LEA, colaborare cu Univ. Lille 1.