Raport Anual

Institutul de Matematică "Simion Stoilow" al Academiei Române

2019

Contents

1 Lucrări publicate la finele lui 2018 şi neconţinute în Raportul pe 2018

1.1 În reviste din străinătate cotate ISI

1. M. Cimpoeaş, F. Nicolae: *On the restricted partition function*, **Ramanujan Journal 47, no. 3** (2018), pag. 565 – 588

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4. R. Pantilie: *On the embeddings of the Riemann sphere with nonnegative normal bundles*, **Electron. Res. Announc. Math. Sci. 25** (2018), pag. 87–95

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40. A. Bahrouni, H. Ounaies, V. D. Rădulescu: *Bound state solutions of sublinear Schrödinger equations with lack of compactness*, **RACSAM 113** (2019), pag. 1191 – 1210

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2.5 Capitole in volume colective

1. Ambro, F.; Kollár, J.: *Minimal Models of Semi-log-canonical Pairs*, **Moduli of K-stable Varieties**, editori: Codogni G., Dervan R., Viviani F., Springer INdAM Series, vol 31 (2019), pag. 1 – 13, ISBN: 978-3-030-13157-9

2. F. F. Nichita: *About the Special Issue Editor / Preface to Hopf Algebras, Quantum Groups and Yang-Baxter Equations*, **Hopf Algebras, Quantum Groups and Yang-Baxter Equations**, MDPI (2019), pag. vii – ix, ISBN: 978-3-03897-324-9 (Pbk), ISBN 978-3-03897-325-6 (PDF)

3 Cărţi publicate în 2019

3.1 În străinătate

1. A.L. Agore, G. Militaru: *Extending structures: Fundamentals and Applications*, CRC Press, Taylor & Francis Group (2019), pag. 224 ISBN: 9780815347842.

2. D. Bulacu, S. Caenepeel, F. Panaite, F. Van Oystaeyen: *Quasi-Hopf algebras. A Categorical approach.* Encyclopedia of Mathematics and its Applications, 171. Cambridge University Press, Cambridge, 2019. xvi+528 pp. ISBN: 978-1-108-42701-2.

3. N. Papageorgiou, V. D. Rădulescu, D. Repovš: *Nonlinear Analysis - Theory and Methods*, Springer Monographs in Mathematics, Springer, Cham (2019), pag. xi+577. ISBN: 978-3-030-03429-0

4. L. Maxim: *Intersection Homology & Perverse Sheaves, with Applications to Singularities*, Graduate Texts in Mathematics, Vol. 281, Springer (2019), pag. XV, 270. ISBN: 978-3-030-27643-0

4 Volume editate în 2019

4.1 In străinătate

1. P. Pucci, V. D. Rădulescu: *Special Issue 'Progress in Nonlinear Kirchhoff Problems',
   Nonlinear Analysis, vol. 186*, Elsevier (2019), pag. 1 – 258. ISSN: 0362-546X

2. J.L. Fiadeiro, I. Ţuţu: *Recent Trends in Algebraic Development Techniques – 24th IFIP
   WG 1.3 International Workshop, WADT 2018, Egham, UK, July 2–5, 2018, Revised
   Selected Papers*, Springer (2019), pag. 181, ISBN: 978-3-030-23219-1

3. F. F. Nichita: *Hopf Algebras, Quantum Groups and Yang-Baxter Equations*, MDPI Elve-
   tia (2019), ISBN 978-3-03897-325-6 (PDF) ISBN 978-3-03897-324-9 (Pbk)

4.2 În ţară

1. Radu Gologan, C. Popescu, et al.: *Romanian Mathematical Competitions, 2019*, Soc. St.
   Mat. din România (2019).

   %beginenumerate

5 Citări (Lista completă este anexată)

- Citări apărute în 2018 şi neconţinute în Raportul pe 2018
  - Citări - fără autocitări: 238
  - Autocitări: 24

- Citări apărute în 2019
  - Citări - fără autocitări: 1091
  - Autocitări: 116

6 Premii

6.1 Premiile Academiei Române

- Arghir-Dani Zărnescu: Premiul Nicolae Dinculeanu

Premii acordate în 2019 pentru lucrări din 2017.

- Aurel Mihai Fulger - Premiul Simion Stoilow

- Anca-Daniela Măcinic - Premiul Gh. Lazăr

- Clement-Radu Popescu - Premiul Gh. Lazăr

- Claudiu Raicu - Premiul Gh. Ţiţeica

- Ionuţ Ţuţu - Premiul Gh. Moisil

6.2 Alte premii

- Radu Purice: Premiul ”Grigore Moisil” al Marii Loje Naţionale a României pe 2019.

- Andrei Sipoş: Premiul pentru Excelenţă în Cercetare Doctorală (Categoria: Matematică şi Informatică) al Asociaţiei Cercetătorilor Români "Ad-Astra" 2018(acordat o dată la doi ani).

- Alexandra Otiman: Premiul Ad Astra pentru excelenţă în cercetare, Secţiunea Afiliere în România - mai puţin de 7 ani de la susţinerea tezei.

- Laurenţiu Maxim: Van Vleck Prize, University of Wisconsin-Madison, 2019 - 2023

- Rareş Răsdeaconu: Premiu oferit de Vanderbilt University (Shanks Endowment) pentru organizarea conferinţei ”Real Enumerative Geometry and Beyond”, Shanks Workshop, 6-7 martie, 2019, Vanderbilt University, USA.

7 Conferinţe

7.1 Organizări de conferinţe

1. R. Purice Co-organizator al Secţiei a 5-a (*Analiză funcţională, Teoria operatorilor, Algebre de operatori şi Fizică matematică*) şi a Sesiunii Speciale *Analiză spectrală şi Transport cuantic* din cadrul celui de al 9-lea Congres al Matematicienilor Români, Galaţi, 28 Iunie - 3 Iulie 2019. https://sites.google.com/view/congmatro9/home

2. R. Purice Co-organizator al celei de a 6-a ediţii a Şcolii de Vară de Matematici Aplicate, Sinaia, 3 - 11 Iulie 2019.
http://www.imar.ro/ purice/Inst/2019/Sinaia-2019.pdf

3. R. Purice Membru în Comitetul de Organizare permanent al Colocviului Franco-Român de Matematici Aplicate.

4. A. Agore Partial evaluations - conferinta sustinuta de Dr. Carmen Constantin (Univ Oxford), IMAR, 29.07.2019,
http://www.imar.ro/ imar/2019/Conferinte/constantin.pdf

5. M. Epure, C. Ionescu: Graded modules over polynomial rings with applications to free divisors (Modules gradus sur anneaux de polynmes avec applications aux diviseurs libres), Bucarest, 19-25 May 2019,
https://math.univ-ovidius.ro/sna/edition.aspx?itemID=13

6. D. Vuza: 2019 IEEE 25th International Symposium for Design and Technology in Electronic Packaging SIITME, Cluj-Napoca, octombrie 2019, www.siitme.ro

7. L. Beznea: Potentiel et Probabilités, Bucureşti, 24-25 ianuarie 2019,
http://www.imar.ro/ imar/2018/Conferinte/Potentiel-Probabilites-2019.pdf

8. L. Beznea, A. Bonciocat, I. Cimpean: Analyse stochastique et thèmes connexes, Bucureşti, 6-9 mai 2019,
https://sites.google.com/site/analysestochastique/

9. L. Beznea: The 22nd Conference of the Romanian Society of Probability and Statistics, Bucureşti, 10-11 mai 2019,
http://www.imar.ro/ imar/2019/Conferinte/flyer3-SPSR-2019.pdf

10. L. Beznea, D. Timotin: The Ninth Congress of Romanian Mathematicians Galaţi, 28 iunie - 3 iulie, 2019,
https://sites.google.com/view/congmatro9/home

11. L. Beznea, M. Cipu: Journés Mathematiques Régionales: Third Romanian-Turkish Mathematics Colloquium, Constanţa, 18-22 septembrie, 2019,
http://math.univ-ovidius.ro/Workshop/2019/RTMC/#/

12. L. Beznea, C. Ionescu, D. Timotin, R. Purice: IMAR70 – Continuant sept décades d'excellence en mathématiques, Bucureşti, 4-5 octombrie 2019,
https://sites.google.com/view/imar70/

13. I. Campean, A. Macinic, C. Palmer-Anghel: Workshop for Young Researchers in Mathematics, Bucuresti, Romania, 3-4 iunie
https://math.univ-ovidius.ro/Workshop/2019/WYRM

14. Mihnea Colţoiu: membru în colectivul ştiinţific al secţiei Real and Complex Analysis, Potential Theory, la The Ninth Congress of Romanian Mathematicians June 28 - July 3, 2019, Galaţi, Romania
https://sites.google.com/view/congmatro9/home

15. Cezar Joiţa: membru în colectivul ştiinţific al secţiei Real and Complex Analysis, Potential Theory, la The Ninth Congress of Romanian Mathematicians June 28 - July 3, 2019, Galaţi, Romania
https://sites.google.com/view/congmatro9/home

16. R. Iordănescu, F. Nichita, M. Pascu: The 14-th International Workshop on Differential Geometry and its Applications, Petroleum-Gas University, Ploiesti, July 9-th - 11 -th, 2019
http://www.imar.ro/ imar/2019/Conferinte/Anunt-diifgeom.pdf/

17. Eugen Mihailescu: Ergodic Theory and Related Fields, IMAR, Bucuresti, 7–11 Octombrie 2019, https://sites.google.com/view/dynamicsbucharest2019

18. L. Ignat: Atelier de travail en Equations aux Derivees Partielles, IMAR, 12-14/12/2018,
http://www.imar.ro/ purice/Inst/2018/afis%20Happy%20PDE-2018.pdf

19. V. Rădulescu: Elsevier-JMAA Conference on Nonlinear Analysis at AGH-UST, 11-12 October 2019
http://www.jmaa-na2019.agh.edu.pl

20. L. Maxim *Singularities in the Midwest Workshop, VI.*, Madison, WI, 15-16 martie 2019,
http://www.math.wisc.edu/∼maxim/Sing19.html

21. L. Maxim AMS Special Session on *Geometry and Topology of Singularities* at the Fall Central Sectional Meeting, University of Wisconsin-Madison, Madison, WI, 14-15 septembrie 2019,
https://www.ams.org/meetings/sectional/2267_program_ss13.html#title

22. R. Stavre: 38th Caius Iacob Conference on Fluid Mechanics and its Technical Applications, Bucureşti, 7-8 noiembrie 2019, www.incas.ro

23. G. Di Fratta, M. Ruggeri, V. Slastikov and A. Zarnescu: *New trends in the variational modeling and simulation of liquid crystals*, ESI Vienna, Austria, 2-6 Decembrie 2019, https://www.asc.tuwien.ac.at/esi-liquidcrystals2019/

24. A. Zarnescu, P. Zhang: *Emerging trends in liquid crystals encompassing modelling, simulation and analysis*, Minisymposium, ICIAM, Valencia, Spain, 15-19 Iulie 2019 https://iciam2019.org/

25. G. Allaire, J. Ball, A. Garroni, F. Otto, V. Slastikov, A. Zarnescu: *New trends and challenges in the mathematics of optimal design*, Workshop at Newton Institute, Cambridge, UK, 10-14 Iunie 2019 https://www.newton.ac.uk/event/dnmw04

26. X. Chen, M. Ravnik, V. Slastikov, A. Zarnescu *Spring school on the mathematical design of materials* Newton Institute, Cambridge, UK, 25-29 Martie 2019 https://www.newton.ac.uk/event/dnmw05

27. S. Scrobogna, A. Zarnescu: *Bilbao workshop on fluid dynamics*, Bilbao, Spain 27 Februarie 2019, http://www.bcamath.org/en/workshops/bcamworkshop20190227

28. X. Chen, M. Ravnik,V. Slastikov and A. Zarnescu*Optimal design of complex materials*, Workshop at Newton Institute, Cambridge, UK 14-18 Ianuarie 2019, https://www.newton.ac.uk/event/dnmw01

29. R. Diaconescu, I. Ţuţu: *Mathematical Structures in Formal System Development and Analysis* (special session of *The Ninth Congress of Romanian Mathematicians*), Galaţi, Romania, 28 June – 3 July 2019 `http://imar.ro/~diacon/MathStrucSDA/`

30. I. Popescu The Ninth Congress of Romanian Mathematicians, section of Probability and Stochastic Processes adresa web

31. V. Paşol, A. Popa: Seventh Bucharest Number Theory Day, August 8, 2019 http://www.imar.ro/ apopa/BNTD7.html

32. V. Paşol, A. Popa: The Ninth Congress of Romanian Mathematicians Number theory special session June 28 - July 3, 2019, Galaţi, Romania https://sites.google.com/view/congmatro9/special-sessions

33. A. Gheondea: International Workshop of Harmonic Analysis and Operator Theory, University of Istanbul, Istanbul, August 26–29, 2019; https://who.istanbul.edu.tr/en/content/welcome/welcome

34. S. Moroianu: Workshop on Riemannian and Kähler Geometry, IMAR Bucharest, April 15 - 19, 2019 http://www.imar.ro/%7Esergium/conf2019/conf2019.html

35. S. Moroianu: Real and Complex Analysis, Potential Theory, section of the Ninth Congress of Romanian Mathematicians, Galati, June 28 – July 3, 2019.
https://sites.google.com/view/congmatro9/sections-and-scientific-committees

36. M. Aprodu, V. Brinzanescu, C. Joiţa, S. Moroianu: Bucharest Conference on Geometry and Physics, Bucharest, Sept. 2–6, 2019.
https://events.theory.nipne.ro/gap/index.php/conference

37. R. Popescu: Sesiunea specială *Selected Topics in Complex and Differential Geometry, Topology, and Singularities* din cadrul Secţiunii 2 a Congresului 9 al Matematicienilor Români, Galaţi, 28 Iunie – 3 Iulie 2019
https://sites.google.com/view/congmatro9/special-sessions

38. A. Măcinic: Selected Topics in Complex and Differential Geometry, Topology, and Singularities, Special Session of The Ninth Congress of Romanian Mathematicians, Galati, Romania, June 28 - July 3, 2019,

    `http://www.imar.ro/%7Eamacinic/ses_spCONGMATRO2019.html`

7.2 Conferinţe şi expuneri susţinute

1. Dorin Cheptea: *Deformation quantization of Poisson structures on the loop algebra of a surface*, 9th Congress of Romanian Mathematicians, Galati, Romania, June - July 2019

2. Nicolae Strungaru: *Weak model sets*, Aperiodic order meets number theory, Matrix institute, University of Melbourne, Creswick, Australia, February 26th, 2019

3. Alexandra-Iulia Otiman: *Dolbeault cohomology of Cousin groups and OT manifolds*, Università Roma Tre, noiembrie 2018.

4. Alexandra-Iulia Otiman: *Dolbeault cohomology of Cousin groups*, Workshop su varietà reali e complesse: geometria, topologia e analisi armonica, Scuola Normale Superiore di Pisa, februarie 2019

5. Alexandra-Iulia Otiman: *A characterization of compact locally conformally hyperKähler manifolds*, Università di Firenze, martie 2019.

6. Alexandra-Iulia Otiman: *Dolbeault cohomology of OT manifolds*, Workshop on Riemannian and Kähler geometry, IMAR, aprilie 2019.

7. Alexandra-Iulia Otiman: *Hermitian and Complex Geometry of a class of Kato manifolds*, Universit degli Studi Internazionali di Roma, mai 2019.

8. Alexandra-Iulia Otiman: *On a class of Kato manifolds*, Max LX, Miniworkshop on Non-Kählerian geometry, Università di Firenze, mai 2019.

9. Alexandra-Iulia Otiman, *On a class of Kato manifolds*, Workshop for Young Researchers in Mathematics, Bucureşti, iunie 2019.

10. Alexandra-Iulia Otiman, *On a class of Kato manifolds*, Complex Analysis and Geometry - XXIV, Levico Terme, iunie 2019.

11. Alexandra-Iulia Otiman, *Dolbeault cohomology of Cousin groups*, Bucharest Conference on Geometry and Physics, IMAR, septembrie 2018.

12. Alexandra-Iulia Otiman, *On a class of Kato manifolds*, Forum des Jeunes Mathématiciennes, Institutul Henri Poincaré, Paris, octombrie 2019.

13. Alexandra-Iulia Otiman, *On a class of Kato manifolds*, Bridging the Gap between Kähler and non-Kähler Complex Geometry, Banff, octombrie 2019.

14. Dan Timotin, *Truncated Toeplitz operators and beyond*, Coorg Meeting on Linear Analysis (India), 6-9 decembrie 2018.

15. Dan Timotin, *Algebras of block Toeplitz matrices*, OTOA, Bangalore (India), 13-19 decembrie 2018.

16. Dan Timotin, *Truncated Toeplitz operators*, Al 15-lea Seminar Româno-Finlandez, Turku (Finlanda), 10-12 iunie 2019.

17. Ionel Popescu, *Elements of Reinforcement Learning*, Georgia Tech, 5 Mai 2019.

18. Ionel Popescu, *Averaging + Learning in Financial Markets*, Galati, 29 Iunie, 2019.

19. Ionel Popescu, *Averaging + Learning in Financial Markets*, Constanta, 19 Sept, 2019.

20. Vicenţiu Paşol, *Structure of finite rings*, The Ninth Congress of Romanian Mathematicians. July 3, 2019, Galaţi, Romania

21. Aurelian Gheondea *A comparison of two generalisations of triplets of Hilbert spaces*, Department of Mathematics, Bilkent University, Ankara, 18.11.2019.

22. Aurelian Gheondea *Distance of the set of commutators to the identity*, Department of Mathematics, Bilkent University, Ankara, 21.10.2019.

23. Aurelian Gheondea *Nevanlinna Type Representations II*, Department of Mathematics, Bilkent University, Ankara, 09.04.2019.

24. Anca Macinic, *Freeness and variations*, The 27th National School on Algebra, IMAR, Bucharest, May 20-24, 2019

25. Aurelian Gheondea *Nevanlinna Type Representations I*, Department of Mathematics, Bilkent University, Ankara, 02.04.2019.

26. Aurelian Gheondea *Symmetries versus Conservation Laws in Dynamical Quantum Systems*, Conference dedicated to Professor Gheorghe Bucur, IMAR Bucharest, 25.01.2019.

27. Aurelian Gheondea *Ordered Groups: A Construction of Real Numbers of Professor Gh. Bucur*, Conference dedicated to Professor Gheorghe Bucur, IMAR Bucharest, 24.01.2019.

28. Sergiu Moroianu, *Tetraedre hiperbolice ideale*, SSMR conference XXIII, Pitesti, Oct. 11–13, 2019.

29. Sergiu Moroianu, *The renormalized volume*, IMAR 70 conference, Bucharest, Oct. 4–5, 2019.

30. Sergiu Moroianu, *Gauss-Bonnet formula for singular manifolds*, Conference of the Mathematical Society of the Republic of Moldova dedicated to the 55th anniversary of the Institute of Mathematics and Computer Science, Chisinau, Sept 28–Oct. 1, 2019.

31. Aurelian Gheondea *Propagation of Fixed Points for Completely Positive Maps and Beyond*, Ergodic Theory and Related Fields, IMAR Bucharest, 7–11 October 2019.

32. Florin Ambro, *Seshadri succesive minima*, IMAR70 Conference, Bucuresti, Octombrie 5 2019

33. Florin Ambro, *Successive minima of line bundles,* The Ninth Congress of Romanian Mathematicians, Galati, Romania, Iunie 30 2019

34. Florin Ambro, *Successive minima of line bundles,* Birational Geometry and Fano varieties, Steklov Institute, Moscow, Rusia, Iunie 25 2019

35. Florin Ambro, *Seshadri succesive minima,* The 17th Affine Geometry Meeting, Kwansei Gakuin University, Osaka, Japonia, Martie 9 2019

36. Florin Ambro, *Classification of algebraic varieties,* Journée de l'equipe AGL, Château de Montchat, Lyon, Januarie 17 2019

37. Mario Maican, *Moduli of sheaves supported on curves of low genus contained in a quadric surface*, Contributed talk, GIT, wall-crossings and moduli spaces (VBAC 2019), Sandbjerg Estate, Aarhus University, Danemarca, 24.06.2019.

38. Mario Maican, *Moduli of sheaves supported on curves of low genus contained in a quadric surface*, Contributed talk, Conference on Geometry and Physics, IMAR, Bucureşti, 02.09.2019.

39. Daniel Matei, *Characteristic varieties of graph manifolds*, Singularities Workshop, martie 2019, Tokyo Metropolitan University, Japonia.

40. Daniel Matei, *Volumes of 3-dimensional Seifert cone-manifolds*, Graduate Topology Seminar, aprilie 2019, University of Tokyo, Japonia.

41. Ana Agore, *Support equivalences of (co)module algebra structures over Hopf algebras*, Aspects of higher representation theory: quantum groups and categorification, Universite Libre de Bruxelles, 21.01.2019 - 25.01.2019.

42. Ana Agore, *The factorization problem*, IMAR Monthly Lecture, Institute of Mathematics of the Romanian Academy, 30.01.2019.

43. Ana Agore, *Universal Hopf algebras of (co)module algebra structures*, The Ninth Congress of Romanian Mathematicians, Dunarea de Jos University of Galati, 28.06.2019 - 03.07.2019.

44. Ana Agore, *Equivalences of (co)module algebra structures over Hopf algebras*, Representation Theory and Integrable Systems, ETH Zurich, 12.08.2019 - 16.08.2019.

45. Costin Vîlcu, *Double normals of most convex bodies*, International Symposium on Convexity and Discrete Geometry, Hebei Normal University, China, 25 - 30 August, 2019

46. Sebastian Burciu, *Conjugacy classes and centralizers for modular tensor categories*, at "The Ninth Congress of Romanian Mathematicians", June 28 - July 3, 2019, Galaţi.

47. Cristian Făciu, *Dynamic induced damage in ductile materials – a rate-dependent vs. a rate-independent approach*, Second Workshop on Analysis, PDEs and Mechanics, 30 May 2019, Faculty of Mathematics and Computer Science, University of Bucharest & Gheorghe Mihoc Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy.

48. Mircea Cimpoeaş, *Polarization and spreading of monomial ideals*, The 27th National School on Algebra, Bucureşti, România, 19-25 mai 2019.

49. Mircea Cimpoeaş, *On the semigroup ring of holomorphic Artin L-functions*, Workshop for Young Researchers in Mathematics, Bucureşti, România, 3-4 iunie 2019.

50. Laura-Elena Năstăsescu, *Frobenius algebras in categories of corepresentations*, The Ninth Congress of Romanian Mathematicians, iunie 28-iulie 3, 2019, Galaţi, România

51. Laura-Elena Năstăsescu, *Are graded semimsimple algebras graded symmetric?*, 3rd Romanian-Turkish Mathematics Colloquim, septembrie 18-septembrie 22, 2019, Constanţa, România

52. Mihai Staic, *Hom-Tensor Categories*, AMS Meeting Auburn University Auburn, AL, March 15, 2019.

53. Nicolae Ciprian Bonciocat, *Logarithmic convex hulls and irreducibility criteria for finite Dirichlet series*, 9th Congress of Romanian Mathematicians, June 28-July 3, 2019, Galaţi, Romania.

54. Mihai Staic, *Hochschild Cohomology and Generalizations*, The University of Iowa, April 1, 2019.

55. Mihai Staic, *Hochschild Cohomology and Generalizations*, DePaul University, Chicago IL, May 3, 2019.

56. Mihai Staic, *Higher order Hochschild (Co)homology*, Galati, Romania, July 2, 2019.

57. Liana David, *Generalized connections, spinors and generalized structures on Courant algebroids*, Workshop on Riemannian and Kähler geometry, IMAR, 15-19 aprilie 2019.

58. Liana David, *Generalized connections and integrability of generalized structures on Courant algebroids*, Al 9-lea Congres al Matematicienilor Romani, Universitatea Dunarea de Jos, Galati, 28 iunie - 3 iulie 2019.

59. Dorin Popescu, *The Bass-Quillen Conjecture and Swan's Question*, expunere la Transient Transcendence in Transylvania, May 13-17, 2019.

60. M. Cipu, *A new view on $D(-1)$-quadruples*, Third Romanian-Turkish Mathematics Colloquim, Ovidius University Constanţa, 19th September 2019

61. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, la "The 14-th Kagoshima Algebra-Analysis-Geometry Seminar", Kagoshima, Japan, 14 februarie 2019.

62. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, Geometry Seminar, Vanderbilt University, Nashville, USA, 22 februarie 2019.

63. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, NYU - Shanghai Colloquium, Shanghai, China, 11 martie 2019.

64. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, Center for Applied Mathematics, Tianjin University, Tianjin, China, 25 aprilie 2019.

65. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, Courant Institute Colloquium, New York University, New York, USA, 29 aprilie 2019.

66. Laurentiu Maxim, *Measuring the complexity of hypersurface singularities in algebraic geometry and topology*, Basque Center for Applied Mathematics, Bilbao, Spain, 21 mai 2019.

67. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, Soochow University, Suzhou, China, 4 iunie 2019.

68. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, Algebraic Geometry Seminar, East China Normal University, Shanghai, China, 6 iunie 2019.

69. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, Algebraic Geometry Seminar, Institute of Mathematics of the Romanian Academy, Bucharest, Romania, 13 iunie 2019.

70. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, la "Singularity Workshop", University of Illinois at Chicago, Chicago, Illinois, 28-29 iulie 2019.

71. Laurentiu Maxim, *Euclidean distance degree and the multiview conjecture*, la conferinta "Non-Isolated Singularities and derived Geometry: A celebration of the 60th birthday of David Massey", Cuernavaca, Mexico, 29 iulie - 3 august 2019.

72. Laurentiu Maxim, *Measuring the complexity of hypersurface singularities in algebraic geometry and topology*, Conference on Hodge Theory in Honor of Donu Arapura's 60th Birthday", Madison, USA, 13 septembrie 2019.

73. M. Cipu, *Report on D(−1)-quadruples*, Representation Theory XVI, Dubrovnik, 28th June 2019

74. Florin Panaite, *{σ, τ}-Rota-Baxter operators, infinitesimal Hom-bialgebras and the associative Hom-Yang-Baxter equation*, in cadrul conferintei aniversare IMAR70, Bucuresti, 4 octombrie 2019

75. V.I. Ursu, *Undecidability of the elementary theory of finite commutative loops*, The Ninth Congress of Romanian mathematicians, "Dunărea de Jos" University of Galaţi, România, June 28 - 3 July 2019.

76. V.I. Ursu: *Archimedis automorpfic loops*, Loops 2019 Conference, Budapest University of Tehnology and Economics, Hungary, July 7 - 13, 2019.

77. Arghir Zarnescu, *Design of nematics through colloidal homogenisation*, 2019 MRS Spring Meeting, SUA, 22-26 Aprilie 2019

78. Arghir Zarnescu, *Emergence of liquid crystal defects induced by flow*, Al 9-lea Congres al Matematicienilor Romani, 28 iunie-3 iulie 2019

79. Arghir Zarnescu, *Design of bulk potentials through colloidal homogenisation*, ICIAM, Valencia, Spania, 15-19 Iulie 2019

80. Arghir Zarnescu, *A dynamical perspective on the defect formation in the Beris-Edwards equations of nematic liquid crystals*, Mathematical Modeling for Science and Engineering, Napoli, Italia, 11-13 Noiembrie 2019

81. V.I. Ursu, *The Holder theorem for monoasociative right-ordered loops*, CAIM - 2019, "Valahia" University, Târgovişte, România, september 19 - 22, 2019.

82. Lucian Beznea, *La théorie axiomatique du potentiel à Bucarest: Boboc-Bucur-Constantinescu-Cornea et les H-cônes*, Potentiel et Probabilités, Bucureşti, 24-25 ianuarie 2019

83. R. Pantilie, *Harmonic maps and twistorial structures*, "Variational problems in geometry and mathematical physics", University of Leeds, G.B., 07-10.01.2019

84. Lucian Beznea, *Multiple-fragmentation stochastic processes driven by a spatial flow,* Séminaire généraliste de l'équipe de Probabilités et Statistiques, Institut Élie Cartan de Lorraine, Nancy, Franţa, 7 februarie 2019

85. Lucian Beznea, *Connexions entre le problème de Dirichlet et de Neumann,* Colloque de la Société Mathématique de Tunisie, CSMT 2019, Sousse, Tunisia, 18-22 martie, 2019

86. Lucian Beznea, *Connections between the Dirichlet and the Neumann problem for integrable boundary data,* Probability and Analysis 2019, Będlewo, Polonia, 20-24 mai 24, 2019

87. Lucian Beznea, *Connections between the Dirichlet and the Neumann problem for integrable boundary data,* Harmonic Analysis and PDE, Holon, Israel, 26-31 mai 2019

88. Lucian Beznea, *Connections between the Dirichlet and the Neumann problem for integrable boundary data,* The 15th Romanian-Finnish Analysis Seminar, Turku, Finlanda, 9-16 iunie 2019

89. Lucian Beznea, *From Gaussian estimates for nonlinear evolution equations to long time behavior of branching processes,* Bielefeld Stochastic Summer, Bielefeld, Germania, 21 august 2019

90. Lucian Beznea, *Connections between the Dirichlet and the Neumann problem for integrable boundary data,* The Fourth International Conference on Applications of Mathematics and Informatics in Natural Sciences and Engineering, Tbilisi, Georgia, 23-26 septembrie 2019

91. Lucian Beznea, *Potential theory for infinite dimensional processes,* Realizing the Potential – Theory in Bielefeld, Bielefeld, Germania, 28 septembrie 2019

92. Lucian Beznea, *From Gaussian estimates for nonlinear evolution equations to long time behavior of branching processes*, International Conference on Applied and Pure Mathematics (ICAPM 2019) Iaşi, 31 octombrie - 3 noiembrie 2019

93. Iulian Cîmpean, *Dealing with not allowed starting points for solutions to singular SDEs in Hilbert spaces: a potential theoretical approach*, The Romanian-Finish seminar, Turku, Finland, 10-12 iunie.

94. Iulian Cîmpean, *The nonlinear Schrödinger equation with white noise dispersion on quantum graphs*, The Ninth Congress of the Romanian Mathematicians Galati, Romania, 28 iunie-3 iulie.

95. Iulian Cîmpean,*A natural extension of Markov processes and applications to singular SDEs*, The Conference of the Romanian Society of Probability and Statistics, Bucharest, Romania, 10-11 mai.

96. Iulian Cîmpean, *A natural extension of Markov processes and applications to singular SDEs*, Bielefeld Stochastic Summer, Bielefeld, Germania, 21 august.

97. Iulian Cîmpean, *A natural extension of Markov processes and applications to singular SDEs*, Analyse stochastique et thèmes connexes, Bucuresti, Romania, 6-9 mai.

98. Iulian Cîmpean, *Sur la construction des processus de Markov avec des méthode de la théorie du potentiel et applications aux ED(P) stochastiques*, Potentiel et probabilités-Conférence dédiée au 80ème anniversaire de Gheorghe Bucur, Bucuresti, Romania, 24-25 ianuarie.

99. Cezar Joiţa, *Local triviality of analytic mappings*, 15th Romanian-Finnish Analysis Seminar, University of Turku, June 10-12, 2019

100. Cezar Joiţa, *The image problem for analytic map germs*, Arc spaces and geometry of singularities Université de Lille, October 15-16, 2019.

101. L. Ignat, *The Schrdinger equation on a tree: dispersion and Hardys uncertainty principle*, 7th International Conference on Mathematics and Informatics September 2-4, 2019, Tg. Mures, Romania

102. L. Ignat, *Null-controllability of the linear Kuramoto-Sivashinsky equation on star-shaped trees*, 9th International Congress on Industrial and Applied Mathematics (ICIAM 2019), 18/07/2019, Valencia, Spain

103. Filip-Andrei Chindea, *Stability conditions on complex manifolds*, Şcoala Naţională de Algebră, 20-24 Mai 2019.

104. Filip-Andrei Chindea, *ACM bundles on abelian surfaces*, Workshop for Young Researchers in Mathematics, 3-4 Iunie 2019

105. L. Ignat, *The Schrödinger equation on a tree: dispersion and Hardy's uncertainty principle*, The Ninth Congress of Romanian Mathematicians, June 28 - July 3, 2019, Galati, Romania

106. Florin Belgun, *J-holomorphic locally conformally symplectic manifolds*, seminarul de geometrie diferenţilă, Univ. Hamburg, 17.06.2019.

107. L. Ignat, *Null-controllability of the linear Kuramoto-Sivashinsky equation on star-shaped trees*, International Conference on Elliptic and Parabolic Problems 20.05.2019-24.05.2019, Gaeta, Italy

108. Clement Radu Popescu *Resonance varieties. Definition and Applications*, International Workshop on Differential Geometry and its Applications, 9–11 Iulie 2019, UPG Ploieşti http://www.imar.ro/ imar/2019/Conferinte/Anunt-diifgeom.pdf

109. Clement Radu Popescu *Resonance varieties. Definition and Results*, Topology, Geometry and Dynamics: Rokhlin-100, 19 – 23 August 2019, The Euler International Institute, Saint Petersburg, Russia http://www.pdmi.ras.ru/EIMI/2019/tgd/

110. L. Ignat, *The Schrödinger equation on a tree: dispersion and Hardy's uncertainty principle*, 2nd Workshop on Analysis, PDEs and Mechanics - 30 May 2019, "Gheorghe Mihoc - Caius Iacob" Institute of Mathematical Statistics and Applied Mathematics, Bucuresti

111. C. Raicu Regularity of $\mathfrak{S}_n$-invariant monomial ideals, AMS Special Session on Combinatorial Algebraic Geometry, Madison, September 2019

112. C. Raicu Regularity of $\mathfrak{S}_n$-invariant monomial ideals, SIAM Conference on Applied Algebraic Geometry, Bern, July 2019.

113. C. Raicu Bigraded Koszul modules and K3 carpets, The Ninth Congress of Romanian Mathematicians, Galaţi, June 2019.

114. C. Raicu Lyubeznik numbers of determinantal rings., Singularities in the Midwest, University of Wisconsin–Madison, March 2019.

115. C. Raicu Koszul Modules, Singularities and Homological Aspects of Commutative Algebra, Oberwolfach, February 2019.

116. G. Paşa, *On the instability of the multi-layer Hele-Shaw flows*, Galaţi , Congr. Matematicienilor Romani, iulie 2019.

117. G. Paşa, *A contradiction in Hele-Shaw displacements*, Ploieşti, Univ. Petrol si Gaze, Conf. Differential Geometry and Applications, iulie 2019.

118. G. Paşa, *A particular eigenvalue problem*, Targovişte, Univ. Valachia, Conferinta ROMAI, septembrie 2019.

119. G. Paşa, *On the instability of two Oldroyd-B fluids displacing in a Hele-Shaw cell* , Bucureşti, INCAS- Inst.Cercetari Aerospaţiale, Conf. Caius Iacob, noiembrie 2019.

120. Palmer-Anghel Cristina, *Coloured Jones polynomials via the topology of configuration spaces*, Renyi Institute Budapesta, Ungaria, 8-10 Martie 2019.

121. Palmer-Anghel Cristina, *Coloured Jones and Alexander polynomials via topological intersection pairings*, The Ninth Congress of Romanian Mathematicians, Galati, Romania, 28 Iunie -3 Iulie 2019.

122. Palmer-Anghel Cristina, $U_q(sl(2))$-*quantum invariants as topological intersection pairings*, Loops in Leeds, Anglia, 1-4 Iulie 2019.

123. Palmer-Anghel Cristina, *A topological model for the family of coloured Alexander invariants* PCMI Park City, Utah, US, 11 Iulie 2019.

124. Delia Ionescu-Kruse, *Travelling wave solutions for some two-component shallow water models*, 2nd Workshop on Analysis, PDEs and Mechanics, Bucureşti, 30 mai 2019.

125. Delia Ionescu-Kruse, *Travelling wave solutions for some two-component shallow water models (irrotational and constant vorticity cases)*, The Ninth Congress of Romanian Mathematicians, Galaţi, România, 28 iunie - 3 iulie, 2019.

126. Delia Ionescu-Kruse, *Some mathematical aspects of geophysical flows*, IMAR70 - Conférence dédiée au 70ème anniversaire de l'Institut de Mathématiques de l'Académie Roumaine, Bucureşti, 4 - 5 octombrie, 2019.

127. Ovidiu Preda, *Kähler and locally conformally Kähler metrics on complex spaces with singularities* - 15th Romanian-Finnish Analysis Seminar, June 1015, 2019, Turku (Finland)

128. Ovidiu Preda, *LCK metrics on complex spaces with quotient singularities* - 9th Congress of Romanian Mathematicians, June 28 - July 3, 2019, Galaţi (Romania);

129. Ovidiu Preda, *Stein domains with prescribed projection in holomorphic fiber bundles* - IMAR70, Confrence ddie au 70me anniversaire de l'Institut de Mathmatiques de l'Acadmie Roumaine, October 4-5, 2019, Bucharest (Romania).

130. Eugen Mihailescu, *Overlap numbers in conformal iterated function systems*, AMS Sectional Meeting, Geometry, Analysis, Dynamics and Mathematical Physics on Fractal Spaces, Univ of Hawaii, Honolulu, USA, March 2019.

131. Eugen Mihailescu, *Dynamical lifts over iterated systems with overlaps*, Invited Speaker la Conference on Dynamics, Measures and Dimension, Bedlewo, Poland, April 2019.

132. Gruia Arsu, *On Schatten-von Neumann class properties of pseudo-differential operators in (θ, τ)-quantization*, The Ninth Congress of Romanian Mathematicians , Galaţi, Romania, June 28 - July 3, 2019.
http://www.imar.ro/~imar/congmatro9/pasteditions.html

133. Vasile Dragan, *On the uniqueness of the bounded and stabilizing solution of a general class of discrete-time Riccati equations*, la a 2-a editie a Seminarului Itinerant Romanesc de Analiza Matematica si Aplicatii, 10-12 Mai 2019, Constanta, Romania.

134. Constantin-Nicolae Beli, *A short exact sequence involving the 2-torsion of the Brauer group*, Al Nouălea Congres al Matematicienilor Români, Galaţi, 28 iunie – 3 iulie 2019.

135. Vasile Dragan, *On the closed-loop Nash equilibrium strategies for a class of sampled data stochastic linear quadratic differential games*, Applied Modeling in Economics,Finance and Social Sciences (AMEFSS 2019), Sozopol, Bulgaria, 29 Iunie 2019.

136. Vasile Dragan, *THE NASH EQUILIBRIUM IN THE PIECEWISE CONSTANT ADMISSIBLE STRATEGIES FOR STOCHASTIC LQ GAMES*, La a 11th International Conference DIGITAL TRANSFORMATION OF THE ECONOMY AND SOCIETY: SHAPING THE FUTURE, Universitatea Prilep, Macedonia de Nord, 19 Oct. 2019.

137. Radu Purice: *Floquet theory - a quantum mechanical point of view.* Colloqium talk la University of Illinois at Chicago; 3 Aprilie, 2019.

138. Radu Purice: *Peirl's substitution at the bottom of the spectrum in the absence of Wannier functions.* University of Illinois at Chicago, 8 Aprilie, 2019

139. Marian Aprodu, *Koszul modules and Green's conjecture*, Algebraic Geometry Seminar, TU Muenchen, Germany, May 16, 2019.

140. Marian Aprodu, *Koszul Modules and Applications*, IMAR70 Conference, Bucharest, October 4-5, 2019.

141. Marian Aprodu, *Koszul Modules and Applications*, International Conference on APPLIED AND PURE MATHEMATICS, Iaşi, Romania, October 31 - November 3, 2019.

142. Marian Aprodu, *Green's conjecture and vanishing of Koszul modules*, Workshop on Algebraic Geometry, KIAS Seoul, South Korea, 19-21 November 2019.

143. Marian Aprodu, *Green's conjecture and vanishing of Koszul modules*, Hyperplane Arrangements and Singularities (Hyper-JARCS), University of Tokyo, Japan, December 2-6, 2019.

144. Ovidiu Pasarescu, *Infons and Energons, the two faces of a String: I The Theory of Infons*, IFIN-HH (Inst. pentru Fizica si Inginerie Nucleara Horia Hulubei), Seminarul Stiintific Geometry and Physics, 7 iunie 2019

145. Ovidiu Pasarescu, *Infons and Energons, the two faces of a String: II The Category of Infons*, UPG(Univ. de Petrol si Gaze) Ploiesti, XIVth International Workshop on Differential Geometry and Applications, 9-11 iulie 2019 .

146. Ovidiu Pasarescu, *Applications of Non-standard Analysis Algebraic Geometry, Number Theory and Neuroscience*, International Congress of Romanian Mathematicians, Univ. Dunarea de jos, Galati, August 2019.

147. Ovidiu Pasarescu, *Infons and Receptons as Fundaments of String Theory and Emergent Quantum Physics*, International Conference on Geometry and Physics, Bucharest (IMAR), Septembrie 2019.

148. Ovidiu Pasarescu, *The Gosset Polytope Built with (-2) Curves on Del Pezzo Surfaces of Degree 1*, Romanian - Turkish Workshop, Univ. din Constanta, Septembrie 2019.

149. Ovidiu Pasarescu, *Applications of the Understanding of the Structure of Del Pezzo Surfaces in Physics and Neuroscience*, International Conference on Differential Geometry and Dynamic Systems, Univ. Politehnica, Bucuresti, octombrie 2019.

150. Rareş Răsdeaconu, *Counting real rational curves on K3 surfaces*, Special Session on Geometry and Topology of Singularities, Fall Central AMS Sectional Meeting University of Wisconsin-Madison, Madison, WI, USA, 14-15 septembrie 2019.

151. Mugurel Barcau, Vicentiu Pasol, *On the IND-CPA Security of Ring Homomorphic Encryption Schemes over $\mathbb{F}_2$*, 5th Edition of Romanian Cryptology Days Conference: "Cryptography and Beyond, in a Connected World", Bucharest, September 16-18, 2019.

152. C. Anghel, *Lie theory and infinitesimal extensions in algebraic geometry*, XIII. International Workshop LIE THEORY AND ITS APPLICATIONS IN PHYSICS , Varna, 17 - 23 June, (2019).

153. C. Anghel, *Plane curves invariants from quantum braid groups representations*, The Ninth Congress of Romanian Mathematicians , Galati, June 28 - July 3, (2019).

154. Vasile Brinzanescu, *Algebraic methods for solutions of Bloch-Iserles Hamiltonian systems*, Conference: Transient Transcendence in Transylvania, Brasov, 13-17 mai 2019.

155. Vasile Brinzanescu, *Moduli spaces of vector bundles on elliptic fibrations*, The Ninth Congress of Romanian Mathema

156. Miron Stanciu, *Locally conformally symplectic reduction of the cotangent bundle*, Riemann and Kähler Geometry, Bucureşti, 15-19 aprilie 2019.

157. Miron Stanciu, *Locally conformally symplectic reduction of the cotangent bundle*, Workshop for Young Researchers in Geometry, Bucureşti, 3-4 iunie 2019.

158. Miron Stanciu, *Locally conformally symplectic reduction of the cotangent bundle*, Workshop on Contact and Poisson Geometry, Timişoara, 31 octombrie - 2 noiembrie 2019.

159. Miron Stanciu, *Acoperiri ale spaiilor LCK cu singulariti*, Colocviu de geometrie - Ianu LXXX, Bucureşti, 15 noiembrie 2019.e-03 iulie 2019.

160. Vasile Brinzanescu, *Moduli of vector bundles as integrable Hamiltonian systems*, Bucharest Conference on Geometry and Physics, IMAR, 02-06 septembrie 2019.

161. Vasile Brinzanescu, *Algebraic methods for solutions of Bloch-Iserles Hamiltonian systems*, 3rd Romanian-Turkish Mathematics Colloquium, Ovidius University Constanta, 18-22 septembrie 2019.

162. Vasile Brinzanescu, *Solutions for some Bloch-Iserles Hamiltonian systems*, Conferinta 55 de ani de la fondarea Institutului de Matematica si Informatica al Academiei de Stiinte din Moldova, Chisinau, 28 septembrie - 02 octombrie 2019.

163. Marius Buliga, *Artificial physics for artificial chemistries*, Seminar: Geometry & Physics, DFT (IFIN-HH), 13 Mai 2019

164. Lori Badea, *Additive and restricted additive Schwarz-Richardson methods for inequalities with nonlinear monotone operators*, 9th Congress of Romanian Mathematicians, June 28-July 3, 2019, Galati, Romania (https://sites.google.com/view/congmatro9/home)

165. Grigory Panasenko, Ruxandra Stavre, *Junction of 3D-1D models of a vessel with elastic wall*, Mathematical Modeling in Biomedicine, Moscow, 30 sept-4 oct 2019.

    eng.rudn.ru/science/conferences/9370

166. Ruxandra Stavre, *Control of fluid-structure interaction problems with medical applications*, Multiscale Modeling in Fluid Mechanics and Fluid-Structure Interaction, Vilnius, 7-11 October 2019 (invited speaker).

    https://www.muscogeo.mif.vu.lt/conference/about-conference

167. Ruxandra Stavre, *Asymptotic analysis of a viscous fluid layer separated by a thin stiff stratified elastic plate*, 38th Caius Iacob Conference on Fluid Mechanics and its Technical Applications, Bucureşti, 7-8 noiembrie 2019.

168. Cristian Cobeli, *DOI*, The ninth Congress of Romanian Mathematicians, June 28 - July 3, 2019, Galai, Romania.

169. Adrian Diaconu, *Moments of L-functions*, The Ninth Congress of Romanian Mathematicians, Galaţi, June 28 – July 3, 2019.

170. Ionuţ Ţuţu, *An introduction to hybrid-dynamic first-order logic*, Logic Seminar (FMI & IMAR), Bucharest, Romania, 16 May 2019

171. Ionuţ Ţuţu, *Kripke congruences*, The Ninth Congress of Romanian Mathematicians, Galaţi, Romania, 28 June – 3 July 2019

172. Ionuţ Ţuţu, *Birkhoff Completeness for Hybrid-Dynamic First-Order Logic*, Automated Reasoning with Analytic Tableaux and Related Methods – 28th International Conference (TABLEAUX 2019), London, UK, 3–5 September 2019

173. Ionuţ Ţuţu, *Kripke congruences*, IMAR70 – Conférence dédiée au 70éme anniversaire de l'Institut de Mathématiques de l'Académie Roumaine, Bucharest, Romania, 4–5 October 2019

174. Ionuţ Ţuţu, *Logical Support for Bike-Sharing System Design*, SG65 @ The 23rd Symposium on Formal Methods, Porto, Portugal, 7–11 October 2019

175. Alexandru A. Popa, *A combinatorial refinement of the Kronecker-Hurwitz class number relation.* Transient Transcendence in Transylvania, Brasov, 13–17 mai 2019

176. Alexandru A. Popa, *Multiple Dirichlet series for affine Weyl groups*, CRM 9, Galati, 28 iunie–3 iulie 2019

177. Mihai Prunescu, *The exponential diophantine problem for Q is undecidable*, 9.th Congress of the Romanian Mathematicians, Galati 2019. [cu aceasta ocazie am prezentat si rezultatul preprintului Continuous Choice din 2018]

178. Mihai Prunescu, *Homomorphisms of abelian p-groups produce p-automatic recurrent sequences*, 9.th Congress of the Romanian Mathematicians, Galati 2019.

179. Mihai Prunescu, *A mathematical logic approach to the special theory of relativity and symmetric twins*, Physics beyond Relativity, Prague, Czech Republic, October 18 - 21, 2018.

180. Andrei Sipoş, *The finitary content of sunny nonexpansive retractions*, Days of Logic and Computability IV (Shanin-100), Sankt Petersburg, Rusia, 23-26 mai 2019.

181. Andrei Sipoş, *The finitary content of sunny nonexpansive retractions*, Al Nouălea Congres al Matematicienilor Români, Galaţi, România, 28 iunie - 3 iulie 2019.

182. Andrei Sipoş, *The finitary content of sunny nonexpansive retractions*, 13th International Conference on Fixed Point Theory and its Applications, Xinxiang, China, 9-13 iulie 2019.

183. Andrei Sipoş, *The finitary content of sunny nonexpansive retractions*, PCC (Proof, Computation, Complexity) 2019, Institut Mittag-Leffler, Djursholm, Suedia, 15-19 iulie 2019.

184. Andrei Sipoş, *Bounds on strong unicity for Chebyshev approximation with bounded coefficients*, Logic Colloquium 2019, Praga, Cehia, 11-16 august 2019.

185. Daniel Beltiţă, *Nonlinear oblique projections in Lie groups*, 15th Romanian-Finnish Analysis Seminar (RomFin2019), 10 – 12 iunie 2019, Turku, Finlanda.

186. Daniel Beltiţă, *The standard groupoid of a von Neumann algebra*, XXXVIII Workshop on Geometric Methods in Physics, 30 iunie – 6 iulie 2019, Białowieża, Polonia.

187. Daniel Beltiţă, *Standard groupoids of von Neumann algebras*, International Conference on Applied and Pure Mathematics (ICAPM2019), 31 octombrie – 3 noiembrie 2019, Iaşi, România.

188. Mihai Popa 30th International Workshop in Operator Theory and Applications, Lisbon, Portugal, 22-26 iulie 2019

189. Mihai Popa Fields Institute, Workshop on Applications to Random Matrices and Free Probability of Free Noncommutative Functions, Toronto, iunie 2019

190. Mihai Popa New Developments in Free Probability and Applications, Centre de Recherches Mathematiques, Montreal, martie 2019

191. Florin Rădulescu, *Transfering unitary representations from $PSL(2,R)$ to $PSL(2,Q_p)$-an operator algebra approach*, Geometry and Approximation Conference, Universitatea Dresda, Germania, 5-12.0819.

192. Liviu Ornea, *The Kähler geometry of the Weinstein fibration*, IMPA (aprilie); Bucharest Conference on Geometry and Physics, IMAR (septembrie), Higher School of Economics, Moscova (octombrie).

193. Florin Nichita, *Numere transcedentale, ecuatii Yang–Baxter si aplicatii in topologie*, The Ninth Congress of Romanian Mathematicians, Galai, iunie 28 - iulie 3, 2019

194. Florin Nichita, *Structuri non–asociative si aplicatii*, THE 14-th INTERNATIONAL WORKSHOP ON DIFFERENTIAL GEOMETRY AND ITS APPLICATIONS, UPG Ploiesti, 9 – 11 iulie 2019.

8 Alte activităţi

8.1 Conducere granturi

- R. Rasdeaconu În 2019, am beneficiat de urmatoarele granturi:

  - Grant de cercetare cu titlul "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 6 ani, şi care a început in 2013.

- Grant NSF (DMS - 1711567) in valoare de 12000USD pentru organizarea conferinţei "The Topology of Real Algebraic Varieties: Deterministic and Random Aspects", Shanks Workshop, March 11-12, 2017, Vanderbilt University.

- Grant NSF (DMS - 1804586) in valoare de 12570USD pentru organizarea conferinţei "Complex Differential Geometry", Shanks Workshop, March 2-3, 2018, Vanderbilt University.

- M. Aprodu CNCS-UEFISCDI project PN-III-P4-ID-PCE-2016-0030, Moduli Spaces and Homological Methods in Geometry and Topology.

- R. Purice Secretar Ştiinţific al Centrului Francofon de Matematică Bucureşti - IMAR, finanţat de Biroul Europa Centrală şi Orientală al Agenţiei Universitare a Francofoniei. În cadrul lui am co-finanţat 6 Conferinţe internaţionale la care IMAR a fost co-organizator.

- R. Purice Coordonator Român al Reţelei Internaţionale GDRI ECO-Math, finanţată de CNRS (Franţa), Academia Română şi de IMAR.

- S. Burciu - Director grant, "Hopf algebras representations and tensor categories", PN-III-P4-ID-PCE-2016-0157.

- L. Beznea Director de proiect al grantului Idei, PN-III-P4-ID-PCE-2016-0372, din programul PNCDI III, 2017-2019.

- E. Mihailescu Director de proiect, grantul PN III-P4-ID-PCE-2016-0823, Dynamics and Differentiable Ergodic Theory, UEFISCDI Romania.

- L. Maxim *Topology of complex algebraic varieties*, cercetare, $09/2018 - 08/2023$, Simons Foundation Collaboration Grants for Mathematicians (USA).

- V. Radulescu *Analiza calitativă şi numerică a unor clase de sisteme diferenţiale anizotrope si aplicaţii*, Grant CNCS Idei "Proiecte de Cercetare Exploratorie" (CNCS-UEFISCDI PN-III-P4-ID-PCE-2016-0130)

- B. Ichim Am condus Grantul de Mobilitate a Cercetatorilor nr. PN-III-P1-1.1-MC-2019-0297 in perioada 5.09.2019 – 1.10.2019.

- V. radulecu Analysis of continuous and discrete mathematical models in biology, chemistry and genetics, Grant N1-0064 finanţat de ARRS (Slovenian Research Agency)

- C. Raicu NSF Awards DMS - 1600765 and DMS - 1901886.

- Mihai Popa Simons Foundation Collaboration Grant No. 360242 (2015-2021)

- L. Ornea Topics in LCK geometry, Program PNCDI III, Project number PN-III-P4-ID-PCE-2016-0065, Contract number 8/12.07.2017

- S. Moroianu Grant 0330/2017 "Volumul varietatilor hiperbolice si Einstein", Cod: PN-III-P4-ID-PCE-2016-0330, Perioada: 2017-2019.

- L. David director de proiect al grantului 'Geometrii speciale si structuri asociate', cod proiect PN-III-ID-P4-PCE-2016-0019 (perioada de derulare a proiectului: 15 iulie 2017 - 30 decembrie 2019).

8.2   Conducere doctorate

- M. Aprodu Filip Chindea - Universitatea din Bucureşti (octombrie 2016 – septembrie 2019)

- M. Aprodu Laura Filimon - Universitatea din Bucureşti (din octombrie 2017)

- M. Aprodu Mihai Pavel - Universitatea Lorraine Nancy, cotutelă cu Matei Toma (din septembrie 2019)

- R. Purice **Alexandru Mustăţea**, înscris la SCOSAAR - IMAR, anul IV de pregătire a tezei de doctorat cu titlul ”*Integrale Feynman şi ecuaţii cu derivate parţiale pe varietăţi Riemann*”.

- M. Staic Am condus lucrarea de doctorat cu titlul *Properties of Higher Order Hochschild Cohomology* susţinută de Samuel Carolus în Mai 2019 la Bowling Green State University.

- D. Popescu A sustinut teza in 31 Mai 2019 doctoranda mea Zunaira Kosar de la Abdul Salam School of Mathematical Sciences, Govermment College University Lahore, Pakistan.

- E. Mihailescu Conducator de doctorat pentru Rodica Marineac la IMAR, in cadrul SCOSAAR.

- L. Ignat Andreea Grecu, Cotutela cu Liviu Marin, Univ. Bucuresti

- L. Maxim Eva Elduque, University of Wisconsin-Madison (USA), 2019 Ph.D.

- L. Maxim Christian Geske, University of Wisconsin-Madison (USA), 2019 Ph.D.

- L. Maxim Alexander Hof, anul II, University of Wisconsin-Madison (USA)

- C. Raicu Michael Perlman, University of Notre Dame, începând din 2015.

- C. Raicu Zhao Gao, University of Notre Dame, începând din 2017.

- C. Raicu Lizda Nazdira Moncada Morales, University of Notre Dame, începând din 2018.

- D. Timotin Am continuat conducerea doctoratului studentului pakistanez Muhammad Akhsan Khan, de la *Abdus Salam School of Mathematical Sciences* (Lahore).

- S. Moroianu Cipriana Anghel si Rares Stan (inscrisi de la 01.11.2019)

- R. Stavre Conducere doctorat din 1 noiembrie 2019 (doctorand Alexandra Ciorogar).

- A. Zarnescu Răzvan Ceucă in cadrul Basque Center for Applied Mathematics (in co-tutela cu Eugen Vărvărucă, Universitatea ”Al.I. Cuza”, Iasi)

- I. Popescu Emilian Paraicu, Adriana Nistor si Marian Petrica, toti la FMI.

8.3   Membru în colective editoriale

- M. Aprodu Revue Roumaine Math. Pures Appl.
  Math. Reports

- D. Popescu Bulletin RMS

- C. Nastasescu Sunt membru în colectivele editoriale ale următoarelor reviste:

  - Analele Universităţii din Bucureşti, Seria Matematică.
  - Revue Roumaine des Mathématiques Pures et Appliquées.
  - Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie.
  - Analele Ştiinţifice ale Universităţii "Ovidius" din Constanţa, Seria Matematică.
  - Analele Universităţii din Craiova, Seria Matematică - Informatică.
  - Mathematica (Cluj).

- Calin Popescu Editor la *Gazeta Matematică, Seria A.*

- M. Cipu Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie

- M. Cipu Gazeta Matematică, Seria A

- L. Beznea 1. *Advances in Pure and Applied Mathematics*, De Gruyter
  2. *Revue Roumaine Math. Pures Appl., Math. Reports*, (co-editor şef), Editura Academiei Romane
  3. *Proc. Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science*, Editura Academiei Romane

- Mihnea Colţoiu: editor la Proceedings of the Romanian Academy, Series A

  Mihnea Colţoiu: editor la Acta Universitatis Apulensis

- Cezar Joiţa: Secretar stiintific al comitetului de redactie la Revue Roumaine de Mathématiques Pures et Appliquées.

- Florin Rădulescu Libertas Matematicae Journal of Operator Theory

- Cezar Joiţa: Secretar stiint ific al comitetului de redactie la Mathematical Reports.

- E. Mihailescu Editorial Board, Discrete and Continuous Dynamical Systems – series S, American Institute for Mathematical Sciences, ISI impact factor 0,545.

- Dan Timotin Journal of Operator Theory. Revue Roumaine de Mathématiques Pures et Appliquées. Mathematical Reports. Analele Ştiinţifice ale Universităţii "Alexandru Ioan Cuza" din Iaşi, Matematică.

- V. Radulescu - Editor of the MATHEMATICS IN SCIENCE AND ENGINEERING Book Series, Academic Press (an imprint of Elsevier Oxford)

  - Editor of De Gruyter Book Series in Nonlinear Analysis and Applications

  - Editor-in-Chief and founder of *Advances in Nonlinear Analysis* (Walter de Gruyter)

- Editor-in-Chief of *Boundary Value Problems* (Springer Open)

- Associate Editor of *Nonlinear Analysis: Theory, Methods & Applications* (Elsevier)

- Associate Editor of the *Journal of Mathematical Analysis and Applications* (Elsevier)

- Associate Editor of the *Mathematical Methods in the Applied Sciences* (Wiley)

- Associate Editor of the *Bulletin of Mathematical Sciences* (World Scientific)

- Member of the Editorial Board of *Complex Variables and Elliptic Equations* (Taylor & Francis)

- Associate Editor of *Discrete and Continuous Dynamical Systems, Series S* (American Institute of Mathematical Sciences)

- Associate Editor of the *Journal of Mathematics and Applications* (Rzeszow University of Technology)

- Editor of *Advances in Pure and Applied Mathematics* (Walter de Gruyter)

- Member of the Editorial Committee of *Opuscula Mathematica* (AGH University of Science and Technology, Krakow)

- Member of the Editorial Board of *Journal of Numerical Analysis and Approximation Theory* (Romanian Academy)

- Member of the Editorial Board of *Ann. St. Univ. Ovidius Constanta*

- C. Ionescu Asia Mathematika

- V. Dragan International Journal of Innovative Computing, Information and Control (IJI-CIC), 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. Acta Universitatis Apulensis, Serie Mathematica Informatica, Member of the Editorial Board. Honorary Board of Romanian Itinerant Seminar on Math. Analysis and Applications.

- V. Brinzanescu Editor la Bull. Math. SSMR, Serdica Math. J., Bull. Univ. Politech. Buc., An. Univ. Ovidius Constanta

- L. Badea Membru în Comitetul Editorial al Conferinţei The Sixth International Conference on Parallel, Distributed, GPU and Cloud Computing for Engineering (PARENG 2019), Pecs, Hungary, 4th-5th June 2019, https://pareng.hu/

- R. Diaconescu *Studies in Universal Logic* book series at Springer Basel, Switzerland.

- L. Ornea Bulletin Math. de la Soc. Math. Roumanie; Math reports; Revue roumaine de math. pures et appliquées.

- Daniel Beltiţă este membru in comitetul editorial al revistei Analele Ştiinţifice ale Universităţii ,,Al.I.Cuza" din Iaşi —Matematică (http://www.math.uaic.ro/∼annalsmath/).

- A. Gheondea Journal of Operator Theory – Fundaţia Theta, Bucureşti — din 1995;

Complex Analysis and Operator Theory – Birkhäuser Verlag, Basel — din 2007;

Opuscula Mathematics – AGH University of Science and Technology, Krakow — din 2005;

Journal of Function Spaces – Hindawi Limited, London — din 2008.

- I. Popescu Mathematical Reports Revue Roumaine de Mathematique Pures et Appliquees

- V. Timofte Editor Asociat, *Australian Journal of Mathematical Analysis and Applications (AJMAA)*, Perioada 2005-prezent.

- F. Nichita Axioms, MDPI, Basel, Elvetia (ISSN 2075-1680).

  Sci, MDPI, Basel, Elvetia (ISSN 2413-4155).

8.4 Lucrări acceptate la publicat

1. Gabriel Bădiţoiu: *Classification of homogeneous Einstein metrics on pseudo-hyperbolic spaces*, acceptata la Transformation Groups, pag. 28.

2. Marian Aprodu, Gianfranco Casnati, Laura Costa, Rosa Maria Miro-Roig, Monserrat Teixidor i Bigas: *Theta divisors and Ulrich bundles on geometrically ruled surfaces*, Annali di Matematica Pura ed Applicata, pag. 18

3. Marian Aprodu, Yeongrak Kim: *On the Borisov-Nuer conjecture and the image of the Enriques-to-K3 map*, Mathematische Nachrichten, pag. 11

4. Mircea Cimpoeaş *On the restricted partition function via determinants with Bernoulli polynomials*, acceptata la Mediterranean Journal of Math., pag. 18

5. Muhammad Ahsan Khan, Dan Timotin: *Algebras of block Toeplitz matrices with commuting entries*, acceptata la Linear and Multilinear Algebra.

6. Mircea Cimpoeaş *On the restricted partition function via determinants with Bernoulli polynomials II*, acceptata la Revista de la UMA, pag. 9

7. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu: *Hopf algebra actions and transfer of Frobenius and symmetric properties*, acceptată la **Mathematica Scandinavica**.

8. M. Cipu, A. Filipin, Y. Fujita: *Diophantine pairs that induce certain Diophantine triples*, acceptată la **J. Number Theory**, 48 pag.

9. M. Cipu, A. Dujella, Y. Fujita: *Diophantine triples with largest two elements in common*, acceptată la **Period. Math. Hung.**, 15 pag.

10. Ruxandra Stavre: *Optimization of the blood pressure with the control in coefficients*, acceptată la Evolution Equations and Control Theory, 21 pag., DOI: 10.3934/eect.2020019

11. Julia Orlik, Grigory P. Panasenko, Ruxandra Stavre: *Asymptotic analysis of a fluid layer separated by a stiff stratified elastic plate*, acceptată la Applicable Analysis, 38 pag., DOI: 10.1080/00036811.2019.1612051

12. L. Liu, A. Makhlouf, C. Menini, F. Panaite: *Rota-Baxter operators on BiHom-associative algebras and related structures*, acceptata la **Colloq. Math.**

13. D. Bulacu, F. Panaite, *Some ribbon elements for the quasi-Hopf algebra $D^\omega(H)$*, acceptata la **J. Algebra Appl.**

14. M. Colţoiu, C. Joiţa: *Some problems related to Levi problem for Riemann domains over Stein spaces*, acceptata la Complex Variables and Elliptic Equations, pag. 4.

15. M. Colţoiu, C. Joiţa: *Geometric Convexity Properties of Coverings of 1-Convex Surfaces*, acceptata la J. Geom. Anal., pag. 15.

16. C. Joiţa, M. Tibăr: *Images of analytic map germs and singular fibrations*, acceptata la European Journal of Mathematics, pag. 17.

17. Ionescu-Kruse D, *Exponential profiles producing genuine three-dimensional nonlinear flows relevant for equatorial ocean dynamics*, acceptata la **J. Differential Equations**, pag. 1–19.

18. G. Deschamps, E. Loubeau, R. Pantilie: *Harmonic maps and twistorial structures*, Mathematika, (în curs de apariţie)

19. George-Ionuţ Ioniţă; Ovidiu Preda: *q-pseudoconvex and q-holomorphically convex domains*, publicat online în **Math. Nachr.**, DOI: 10.1002/mana.201800259.

20. George-Ionuţ Ioniţă; Ovidiu Preda: *LCK metrics on complex spaces with quotient singularities*, publicat online în **Manuscripta Math.**, DOI: 10.1007/s00229-019-01141-w.

21. Ingrid Beltiţă, Daniel Beltiţă, *On the isomorphism problem for $C*$ -algebras of nilpotent Lie groups*, acceptata Journal of Topology and Analysis (doi 10.1142/S1793525320500296), 30 pag.

22. Gheorghe Nenciu, Irina Nenciu: *On essential self-adjointness for first order differential operators on domains in $\mathbb{R}^d$* acceptata la Journal of Spectral Theory

23. V. Dragan, S. Aberkane, *Exact detectability and exact observability of discrete-time linear stochastic systems with periodic coefficients*, acceptata la Automatica, pag. 11

24. Cristina Ana-Maria Anghel; Nathan Geer
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25. V. Dragan, I.G. Ivanov, *On the stochastic linear quadratic control problem with piecewise constant admissible controls*, acceptata la Journal of Franklin Institute, pag. 39.

26. Y. Liu, L. Maxim, B. Wang: *Perverse sheaves on semi-abelian varieties - a survey of properties and applications*, acceptata la European Journal of Mathematics (published online); DOI: 10.1007/s40879-019-00340-9.

27. E. Elduque, L. Maxim: *Higher order degrees of affine plane curve complements*, acceptata la acceptata la Indiana University Mathematics Journal.

28. L. Maxim, J. Rodriguez, B. Wang: *Euclidean distance degree of the multiview variety*, acceptata la SIAM Journal on Applied Algebra and Geometry.

29. A. Diaconu: *Equivariant Euler characteristics of* $\overline{\mathcal{M}}_{g,n}$, acceptată la Algebraic Geometry.

30. J. Itoh, J. Rouyer, C. Vîlcu: *Some inequalities for tetrahedra*, acceptată la Beiträge zur Algebra und Geometrie, 14 pag.

31. A. Diaconu și I. Whitehead: *On the third moment of* $L(\frac{1}{2}, \chi_d)$ *II: the number field case*, acceptată la J. Eur. Math. Soc. (JEMS).

32. L. Maxim, J. Rodriguez, B. Wang: *Euclidean distance degree of projective varieties*, acceptata la Int. Math. Res. Not.

33. V. Lie: *The Polynomial Carleson Operator*, https://arxiv.org/abs/1105.4504, acceptata la Annals of Mathematics, 99 pagini.

34. Brown, Michael; Huang, Hang; Laudone, Robert; Perlman, Michael; Raicu, Claudiu; Sam, Steven S; Santos, João Pedro. *Computing Schur complexes*, arXiv: 1812.00790. Acceptat de revista Journal of Software for Algebra and Geometry.

35. R. Ignat, L. Nguyen, V. Slastikov and A. Zarnescu *On the uniqueness of minimisers of Ginzburg-Landau functionals*, acceptata la Ann. Sci. Éc. Norm. Supér.

36. G. DiFratta, V. Slastikov, J. Robbins and A. Zarnescu *Landau-de Gennes corrections to the Oseen-Frank theory of nematic liquid crystals*, acceptata la Archive for Rat. Mech. Anal.

37. G. Canevari and A. Zarnescu *Design of effective bulk potentials for nematic liquid crystals via colloidal homogenisation*, acceptata la Mathematical Models and Methods in Applied Sciences

38. Andrei Sipoș: *Proof mining in* L^p *spaces*, arXiv:1609.02080 [math.LO], acceptată la *Journal of Symbolic Logic*.

39. Ulrich Kohlenbach, Andrei Sipoș: *The finitary content of sunny nonexpansive retractions*, arXiv:1812.04940 [math.FA], acceptată la *Communications in Contemporary Mathematics*.

40. autorii: Colin Adams, Jim Hoste, Martin Palmer *Triple-crossing number and moves on triple-crossing link diagrams*, acceptată la **Journal of Knot Theory and Its Ramifications**.

41. autorii: Martin Palmer *Homological stability for moduli spaces of disconnected submanifolds, I*, acceptată la **Algebraic and Geometric Topology**.

42. I. Beltiţă, D. Beltiţă: *On the isomorphism problem for* C^*-*algebras of nilpotent Lie groups*, acceptată la Journal of Topology and Analysis (DOI: 10.1142/S1793525320500296).

43. autorii: N. Strungaru *On the Fourier Transformability of Strongly Almost Periodic Measures*, acceptata la Canadian Journal of Mathematics, 28 pag.

44. Liana David, Claus Hertling, *(T)-structures over two-dimensional F-manifolds: formal classification*, acceptata la Ann. Mat. Pura Applic., DOI:10.1007/s10231-019-00919-9, pag. 22.

45. A. Dimca, D. Ibadula, A. Măcinic *Numerical invariants and moduli spaces for line arrangements*, acceptata la Osaka Journal of Mathematics.

8.5   Preprinturi elaborate în 2019

1. S. Burciu, *Conjugacy classes and centralizers for pivotal fusion categories*, arxiv:1904.02226 /2019, pag. 34.

2. S. Burciu, *Representations and conjugacy classes of semisimple quasitriangular Hopf algebras*, arXiv:1709.02176 /2019, pag. 24.

3. Marius Buliga, *On the information content of the difference from hamiltonian evolution*, **arXiv:1902.04598 [math-ph]** (2019)

4. Mircea Cimpoeaş, Florin Nicolae: *Artin L-functions to almost monomial Galois groups*, https://arxiv.org/pdf/1909.03718, pag. 6

5. Mircea Cimpoeaş: *Two semigroup rings associated to a finite set of germs of meromorphic functions*, https://arxiv.org/pdf/1907.12099, pag. 11

6. Mircea Cimpoeaş: *On a generalization of monomial groups*, arxiv.org/1910.12683,pag.17

7. V. Lie: *A unified approach to three themes in harmonic analysis (I and II):(I) The linear Hilbert transform and maximal operator along variable curves; (II) Carleson Type operators in the presence of curvature; (III) The bilinear Hilbert transform and maximal operator along variable curves*, https://arxiv.org/abs/1902.03807, 104 pagini.

8. A. Gaitan, V. Lie: *The Boundedness of the (Sub)Bilinear Maximal Function along "non-flat" smooth curves*, https://arxiv.org/abs/1903.11002, 22 pagini.

9. C. Ionescu *Finite generation of André-Quillen (co-)homology of F-finite algebras*, preprint arXiv 1909.08257, pag. 6.

10. L. Maxim, J. Rodriguez, B. Wang: *Defect of Euclidean distance degree*, preprint arhiva arXiv: 1905.06758.

11. T. Dumitrescu, M. Epure *A class of multiplicative lattices*, preprint arXiv 1910.18098, pag. 8.

12. Samuel Carolus, Jacob Laubacher, and Mihai D. Staic *A Simplicial Construction for Noncommutative Settings*, arXiv:1905.13310, pag. 9.

13. L. Ornea, M. Verbitsky: *Twisted Dolbeault cohomology of nilpotent Lie algebras*, arXiv:1905.02806, pag. 18

14. P.-A. Nagy, L. Ornea: *Conformal foliations, Kähler twists and the Weinstein construction*, arXiv:1909.11499, pag. 47.

15. L. Ornea, M. Verbitsky: *Supersymmetry and Hodge theory on Sasakian and Vaisman manifolds*, arXiv:1910.01621, pag. 37.

16. Dorin Popescu: *The Bass-Quillen Conjecture and Swan Question*, submitted to Combinatorial structures in algebra and geometry, Editors Dumitru Stamate, Thomasz Szemberg, Springer Proceedings in Mathematics and Statistics Series, (2019), partial e cu jumatate din titlu in arXiv/AC:1810.00617v4.

17. W.Bruns, B. Ichim: *Polytope volume by descent in the face lattice and applications in social choice*, Preprint arXiv:1807.02835.

18. B. Ichim, A. Zarojanu: *On the behavior of the size of a monomial ideal*, Preprint arXiv:1602.08025.

19. Dorin Popescu: *Néron desingularization on extension of valuation rings with an appendix by Kestutis Cesnavicius*, submitted to Springer Collection PROMS, in Proceedings of Transient Transcendence in Transylvania 2019, Eds. Alin Bostan, Kilian Raschel, arXiv/AC:1910.09123.

20. Ambro F.; Ito, A. *Successive minima of line bundles*, preprint arXiv:1901.09341/2019

21. L. Liu, A. Makhlouf, C. Menini, F. Panaite: *BiHom-Novikov algebras and infinitesimal BiHom-bialgebras*, arXiv:math.QA/1903.08145

22. B. Ichim, A.Zarojanu: *On the behavior of the size of a monomial ideal*, arXiv:1602.08025v1

23. R. Pantilie: *On tame ρ-quaternionic manifolds*, arXiv:1901.05072/2019, pag. 19

24. L. Beznea, I. Cîmpean, and M. Röckner: *A natural extension of Markov processes and applications to singular SDEs*, https://arxiv.org/abs/1904.01607, 2019

25. Gelu Paşa: *On the strong instability of the multi-layer Hele-Shaw flows*, arXiv:1910.03576v1 [physics.flu-dyn] - 4 Oct 2019, 12 pag.

26. I. Cîmpean, A. Grecu, *The nonlinear Schrdinger equation with white noise dispersion on quantum graphs*, arXiv:1905.11708.

27. Ovidiu Preda; Miron Stanciu: *Coverings of locally conformally Kähler complex spaces*, arXiv:1911.02379

28. Popa, Mihai *Asymptotic free independence and entry permutations for Gaussian random matrices*, arXiv:1812.01692:

29. Mingo, James A.; Popa, Mihai *Freeness and the Partial Trnasposes of Wishart Random Matrices. Part II*

30. Eugen Mihailescu, Mariusz Urbanski, *Smale endomorphisms over graph-directed Markov systems*, Arxiv:1907.13476, 2019.

31. Vicente Cortés, Liana David *Generalized connections, spinors and integrability of generalized structures on Courant algebroids*, arxiv: 1905.01977v2[mathDG]/2019, pag. 61.

32. Eugen Mihailescu, *Pointwise dimension for a class of measures on limit sets*, Arxiv:1908.10050, 2019.

33. Ingrid Beltiţă, Daniel Beltiţă, *Linear dynamical systems of nilpotent Lie groups*, Preprint arXiv:1910.08738, 22 pagini.

34. Radu Iordanescu, Florin Nichita, Ovidiu Pasarescu *On Unification Theories*, preprint arhiva https://www.preprints.org/manuscript/201910.0105/v1 .

35. R. Ignat, L. Nguyen, V. Slastikov and A. Zarnescu *Symmetry and multiplicity of solutions in a two-dimensional Landau-de Gennes model for liquid crystals*, preprint arXiv:1908.00033

36. G. Canevari and A. Zarnescu *Polydispersity and surface energy strength in nematic colloids*, preprint arXiv:1910.03342

37. E. Fereisl, E. Rocca, G. Schimperna and A. Zarnescu *Nonlinear electrokinetics in nematic electrolytes*, preprint arXiv:1909.00682

38. Huang, Hang; Perlman, Michael; Polini, Claudia; Raicu, Claudiu; Sammartano, Alessio. *Relations between the 2×2 minors of a generic matrix*, arXiv: 1909.11705.

39. Raicu, Claudiu; Sam, Steven V. *Bi-graded Koszul modules, K3 carpets, and Green's conjecture*, arXiv: 1909.09122.

40. Raicu, Claudiu. *Regularity of $\mathfrak{S}_n$-invariant monomial ideals*, arXiv: 1909.04650.

41. Raicu, Claudiu. *Feasibility criteria for high-multiplicity partitioning problems*, arXiv: 1909.02155.

42. Mugurel Barcau, Vicentiu Pasol, *On the IND-CPA Security of Ring Homomorphic Encryption Schemes over $\mathbb{F}_2$*, will be published in the first issue of "Proceedings of the Romanian Academy", Series A, January-March 2020.

43. Mugurel Barcau, Vicentiu Pasol, *Cryptanalysis of Ring Homomorphic Encryption Schemes*, Arhiva IACR: https://eprint.iacr.org/2019/594.pdf.

44. D. Găină, I. Ţuţu: *Horn Clauses in Hybrid-Dynamic First-Order Logic*, CoRR abs/ 1905.04146/2019, pag. 14

45. Mihai Prunescu, *The exponential diophantine problem for Q.*

46. Andrei Sipoş: *Bounds on strong unicity for Chebyshev approximation with bounded coefficients*, arXiv:1904.10284 [math.CA], 2019. Trimis spre publicare.

47. R. Diaconescu: *Introducing H, an institution-based formal specification and verification language*, arXiv:1908.09868 [math.LO]

48. autorii: Martin Palmer, Arthur Soulié *A unified functorial construction of homological representations of families of groups*, **arxiv.org/abs/1910.13423** (2019) 83 pag.

49. D. Beltiţă, A. Odzijewicz: *Poisson geometrical aspects of the Tomita-Takesaki modular theory*, preprint arXiv: 1910.14466 [math.OA], 61 pag.

50. P. Cojuhari, A. Gheondea *A comparison of two generalisations of triplets of Hilbert spaces*, arXiv:1911.03460 [math.FA]/2019, pag. 14.

51. autorii:Jiangning Chen, Zhibo Dai, Juntao Duan, Qianli Hu, Ruilin Li, Heinrich Matzinger, Ionel Popescu, Haoyan Zhai *A cost-reducing partial labeling estimator in text classification problem*, preprint arxiv.org, arXiv:1906.03768

52. autorii: Ionel Popescu, Tushar Vaidya *Averaging plus Learning in financial markets*, preprint arxiv.org, arXiv:1904.08131

53. autorii: Saba Amsalu, Juntao Duan, Heinrich Matzinger, Ionel Popescu *Recovery of spectrum from estimated covariance matrices and statistical kernels for machine learning and big data* preprint arxiv.org, arXiv:1804.09472

54. JY Lee, D. Lenz, C. Richard, B. Sing, N. Strungaru *Modulated crystals and almost periodic measures*, preprint arXiv:1907.07017/2019, pag. 33

55. M. Baake, N. Strungaru, V. Terauds *Pure point measures with sparse support and sparse Fourier–Bohr support*, preprint arXiv:1908.00579/2019, pag. 34

56. Cristina Ana-Maria Anghel: *A topological model for the coloured Alexander polynomials*, preprint arhiva , math.GT arXiv:1906.04056, 43 pagini.

57. C. La Rota, D. T. Vuza, A. Climescu-Haulica, *A Hierarchical Model of the Hypothalamo-Adreno-Pituitary system*, preprint Cold Spring Harbor Laboratory BIORXIV/837724/2019, 46 pag.

58. Deepak K.D., Deepak Pradhan, Jaydeb Sarkar, Dan Timotin: *Commutant lifting and Nevanlinna–Pick interpolation in several variables*, preprint ArXiv:1907.05439.

59. Cristian Anghel, Nicolae Buruiana, Dorin Cheptea: *Lie theory and infinitesimal extensions in algebraic geometry*, submitted

60. D. Matei, cu E. Artal, J.I. Cogolludo, *Characteristic varieties of graph manifolds and quasi-projectivity of fundamental groups of algebraic links*, `arXiv:1904.00729`.

61. D. Matei, *Unitriangular and unipotent representations of finitely presented groups*, preprint 2019.

62. N. Istrati, A. Otiman, M. Pontecorvo, *On a class of Kato manifolds*, arXiv: 1905.03224

63. D. Angella, N. Istrati, A. Otiman, N. Tardini, *Variational problems in conformal geometry*, arXiv: 1907.11189

64. Miron Stanciu: *Locally conformally symplectic reduction of the cotangent bundle*, arXiv:1905.02798 (2019).

65. J. Itoh, C. Vîlcu, T. Zamfirescu: *With respect to whom are you critical?*, arXiv:1903.10908 [math.GT], 19 pag.

66. J. Itoh, J. Rouyer, C. Vîlcu: *Some inequalities for tetrahedra*, arXiv:1906.11965 [math.MG], 14 pag.

67. J. Itoh, C. Vîlcu, L. Yuan, T. Zamfirescu: *Locating diametral points*, arXiv:1910.11638 [math.MG], 12 pag.

8.6   Cooperări ştiinţifice

1. Ana Agore Vrije Universiteit Brussel, Belgia; Perioada: 11.02.2019 - 04.04.2019

2. Ana Agore Vrije Universiteit Brussel, Belgia; Perioada: 23.04.2019 - 11.05.2019

3. Ana Agore Vrije Universiteit Brussel, Belgia; Perioada: 22.08.2019 - 25.08.2019

4. Ana Agore Vrije Universiteit Brussel, Belgia; Perioada: 24.09.2019 - 29.09.2019

5. R. Stavre Vizită în perioada 16 martie-16 aprilie 2019 la Institute Camille Jordan UMR CNRS 5208, Saint-Etienne, Franţa.

6. M. Cipu Inter-University Centre Dubrovnik (Croaţia), 23–29 iunie 2019

7. L. Beznea Université de Lorraine – l'Institut Elie Cartan de Lorraine, Nancy, Franţa, 28 ianuarie - 8 februarie 2019

8. L. Beznea University of Bielefeld, Germania, 24 februarie - 9 martie 2019

9. L. Beznea University of Bielefeld, Germania, 18-31 august 2019

10. S. Moroianu CIRM Luminy, Marsilia, Franta, 6 - 10 Mai 2019.

11. I. Campean Vizite stiintifice la Universitatea Bielefeld, Germania, la invitatia lui M. Röckner, pe perioadele:

    - 24 februarie - 9 martie
    - 18- 31 august
    - 8-21 decembrie (urmeaza)

12. Cezar Joiţa: Universitatea din Lille, 10 - 24 octombrie 2019

13. E. Mihailescu Profesor invitat Institute of Mathematics of the Polish Academy, Poland, si Budapest Univ of Technology, Hungary. Department of Mathematics, Bilkent University, Ankara, 18.03.2019 – 11.06.2019

14. L. Ornea Università degli Studi di Roma 3: februarie;

15. L. Ornea IMPA (Rio de Janeiro): aprilie;

16. L. Ornea Higher School of Economics (Moscova): octombrie.

17. A. Gheondea Department of Mathematics, Bilkent University, Ankara, 14.10.2019 – 6.1.2020

18. L. Ignat IMPA, Univ. Federal Rio de Janeiro, 2-20 ianuarie 2019, Brazilia Universidad de Alicante, 10-17 iulie 2019, Spania

19. V. Radulescu Vizite ştiinţifice la Université de Picardie 'Jules Verne', Amiens (7 zile); Università di Pisa (7 zile); King Saud University, Riyadh (7 zile); Università di Urbino 'Carlo Bo' (7 zile); Central South University, Changsha (30 zile

20. L. Maxim Center for Applied Mathematics, Tianjin University, Tianjin, China, 20-27 aprilie 2019

21. L. Maxim Basque Center for Applied Mathematics, Bilbao, Spain, 15-21 mai 2019

22. L. Maxim East China Normal University, Shanghai, China, 25 mai - 10 iunie 2019

23. R. Rasdeaconu MFO, Oberwolfach (Research in Pairs), Germania, 16 iunie – 29 iunie, 2019.

24. R. Rasdeaconu IRMA, Université "Louis Pasteur", Strabourg, Franţa, 30 iunie – 7 iulie, 2019.

25. I. Tutu Institute of Mathematics for Industry, Kyushu University, Japan
18–31 March 2019

26. I. Tutu School of Science and Engineering, University of Dundee
11 November – 9 December 2019

27. A. Otiman 27-29 Martie 2019, Università di Firenze

28. Daniel Beltiţă a efectuat o vizită de colaborare ştiintifică cu Anatol Odzijewicz la Universitatea din Białystok (Polonia) în perioada 13 – 19 mai 2019.

29. Daniel Beltiţă a efectuat o vizită de colaborare ştiintifică cu Anatol Odzijewicz la Universitatea din Białystok (Polonia) în perioada 19 – 25 august 2019.

30. F. Nichita Univ. Caen, 19–24 octombrie 2019.

31. N. Strungaru In Iunie 2019 am vizitat Bielefeld University, Erlangen University si University of Jena pentru approximativ 3 saptamani in total.

32. Vizita de colaborare la firma Gaming Partner International, Beaune, Franta (www.gpigaming.com) in intervalul 18 noiembrie 2018 - 22 noiembrie 2018.

33. L. Paunescu In perioada 7.10.2019-13.12.2019 activez pe o pozitie postdoctorala la Universitatea din Viena, in cadrul grantului ERC "Analytic properties of infinite groups: limits, curvature, and randomness", director de proiect Goulnara Arzhantseva.

34. D. Vuza Vizite de colaborare la firma Freaquent Froschelectronics GmbH, Graz, Austria (www.freaquent.com) in intervalele 24 februarie 2019 - 22 martie 2019, 7 iulie 2019 - 28 iulie 2019, 30 septembrie 2019 - 26 octombrie 2019.

35. Palmer-Anghel Cristina, *University of Geneva*, Elvetia, 26-30 Noiembrie 2018

36. Palmer-Anghel Cristina, *UC Louvain*, Belgia, 18-21 Martie 2019

37. Palmer-Anghel Cristina, *Park City Research Program*, Utah, US, 7-20 Iulie 2019.

38. C. Vilcu La Hebei Normal University, China, în perioada 6 august - 5 septembrie 2019.