Raport Anual

Institutul de Matematică "Simion Stoilow" al Academiei Române

2017

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2. A.L. Agore, G. Militaru: *Extending structures, Galois groups and supersolvable associative algebras*, **Monatshefte für Mathematik 181** (2016), pag. 1–33

3. Vasile Dragan, Eduardo F. Costa: *Optimal stationary dynamic output-feedback controllers for discrete-time linear systems with Markovian jumping parameters and additive white noise perturbations-*, **IEEE Trans. on Automatic Control, 61,** (2016), pag. 3912 – 3924

4. Cornel Murea, Dan Tiba: *A direct algorithm in some free boundary problems*, **Journal of Numerical Mathematics 24** (2016), pag. 253 – 271

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3. Dragos Costea, Marius Leordeanu: *Aerial image geolocalization from recognition and matching of roads and intersections*, **British Machine Vision Conference (BMVC) 2016. Rangul Conferintei: B**

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2. M. Aprodu, M. Vlădoiu: *Volum omagial pentru Dorin Popescu, cu ocazia împlinirii a 70 de ani*, Bull. Soc. Math. Roumanie (2017), ISSN 1220–3874

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6 Premii

6.1 Premiile Academiei Române

Premii acordate în 2017 pentru lucrări din 2015

1. M. Cipu: Premiul Academiei Române
2. L. Păunescu: Premiul Academiei Române

6.2 Alte premii

- R. Răsdeaconu: Premiu in valoare 4000USD oferit de Vanderbilt University (Shanks Endowment) pentru organizarea conferinţei "The Topology of Real Algebraic Varieties: Deterministic and Random Aspects", Shanks Workshop, March 11-12, 2017, Vanderbilt University.
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7 Conferinţe

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2. A. L. Agore: *Brauer groups, Hopf algebras and monoidal categories*, University of Turin, Italy, 24-27 Mai 2016
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3. M. Staic: Special session on *Cohomology, Deformations, and Quantum Groups* at the AMS meeting at SUNY at Buffalo, Buffalo NY, September 16-17 2017

4. R. Stavre: *The 37-th Caius Iacob Conference on Fluid Mechanics and its Technical Applications*, Bucharest, November 16-17, 2017
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6. L. Beznea: *Joint International Meeting of the German Mathematical Society and the Romanian Mathematical Society*, September 16-19, 2017, Constanta
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9. M. Pascu: *The 13th international workshop on differential geometry and applications*, Ploieşti, September 26-28, 2017
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10. L. Ignat, L. Maxim, A. Măcinic: *Workshop for Young Researchers in Mathematics*, 7th Edition, 18/05/2017-19/05/2017. IMAR, Bucharest, Romania

11. L. Ignat: *Happy PDEs*, 8-9 decembrie 2016, IMAR, Bucharest, Romania

12. M. Aprodu, A. Constantinescu: *Instruments of Algebraic Geometry*, Bucuresti, 11-22 Septembrie 2017
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13. M. Fulger: *Mini-Workshop: Positivity in Higher-dimensional Geometry: Higher-codimensional Cycles and Newton–Okounkov Bodies*, Oberwolfach, Germany, 17 Sep - 23 Sep 2017
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29. C. Sminchisescu: *Neural Information Processing Systems*, NIPS 2017

30. C. Sminchisescu: *IEEE Conference on Computer Vision and Pattern Recognition CVPR 2017*

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7. A.L. Agore: *Bicrossed descent theory for groups. Applications*, 7th European Congress of Mathematics, Technische Universität Berlin, Germany - July 18 - 22, 2016.

8. A.L. Agore, *Galois theory for Lie algebras*, Workshop on Hopf algebras and related topics, University of Turin, Italy - January 21-22, 2016.

9. L. Leuştean: *Proof mining in convex optimization and nonlinear analysis*, Seminário de Lógica Matemática (SLM), Universidade de Lisboa, 20.10.2017.

10. A. Popa: *On the trace formula for Hecke operators*, Fifth Bucharest Number Theory Day, IMAR, 10-11 iulie

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39. C. Joiţa: *Finite coverings of complex spaces by connected Stein open sets*, Complex Analysis and Geometry - XXIII, Levico T. (Trento), iunie 12-15, 2017.

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43. V. Drăgan: *On the minimization of the mean square of the final value of an output of a linear stochastic controlled system*, International Conference on Applied Modeling in Economics, Finance and Social Sciences (AMEFSS), 27-31 August, 2017, Hisar, Bulgaria.

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55. A. Constantinescu: *Linear syzygies, hyperbolic Coxeter groups, and regularity*, Encounter in Topology 'n Algebra, Catania (Italy), iunie 2017.

56. A. Constantinescu: *Castelnuovo-Mumford Regularity Vs. Virtual Cohomological Dimension*, British Mathematics Colloquium - Algebra Workshop, Durham (UK), aprilie 2017.

57. A. Constantinescu: *Linear syzygies, hyperbolic Coxeter groups, and regularity*, Scoala Nationala de Algebra, Bucuresti, septembrie 2017.

58. A. Constantinescu: *Linear syzygies and hyperbolic Coxeter groups*, Berlin-Leipzig Seminar on Algebra, Geometry and Combinatorics - MPI Leipzig, octombrie 2017.

59. A. Constantinescu: *Linear syzygies and Coxeter groups*, GTM Seminar Politecnico di Torino, Italia, noiembrie 2017.

60. A. Constantinescu: *Linear syzygies and hyperbolic Coxeter groups*, CMS Winter Meeting - University of Waterloo, Canada , decembrie 2017.

61. V. Rădulescu: *Two classical results with lack of monotonicity*, "James Serrin: from His Legacy to the New Frontiers", University of Perugia, 30 January-3 February 2017.

62. V. Rădulescu: *Principes variationnels associés à quelques problèmes d'équilibre*, "Le Premier Congrès International sur la Modélisation et le Calcul Scientifique en Ingénierie Mathématiques", Marrakech, 17-20 Avril 2017.

63. V. Rădulescu: *Nonhomogeneous problems with singular weights*, "Fourth Conference on Recent Trends in Nonlinear Phenomena", University of Messina, 18-20 September 2017.

64. V. Rădulescu: *Maximum principle and Keller-Osserman theorem revisited*, Faculty of Applied Mathematics, AGH University of Science and Technology, Krakow, 8 November 2017.

65. V. Rădulescu: *How much monotonicity is necessary in nonlinear PDEs?*, Faculty of Mathematics and Applied Physics, Rzeszow University of Technology, Rzeszow, 17 November 2017.

66. V. Rădulescu: *Nonlinear eigenvalue problems: old and new*, Chair of Optimization and Control, Jagiellonian University, Krakow, 23 November 2017.

67. A. Zărnescu: *On the dynamical emergence of nematic defects* , Mathematical Congress of the Americas, Montreal, July 2017

68. A. Zărnescu: *Hyperbolic-parabolic models for nematic hydrodynamics*, Conference on Elliptic and Parabolic Problems, Gaeta, Italy, May 2017

69. A. Zărnescu: *Recent advances in the variational aspects of the Landau-de Gennes theory of liquid crystals* Phase Transitions Models Workshop, Banff, Canada, May 2017

70. F. Ambro: *Curves with ordinary singularities*, The Second Turkish-Romanian Mathematics Colloquium, Galatasaray University, Istanbul, October 27 2017

71. F. Ambro: *Curves with ordinary singularities,* Instruments of Algebraic Geometry, Bucharest, September 21 2017

72. F. Ambro: *Curves with ordinary singularities,* Stability, Boundedness and Fano varieties, BICMR, Beijing, August 29 2017

73. F. Ambro: *Weakly log canonical varieties,* Conference on Birational Geometry, Simons Foundation, New York, August 22 2017

74. F. Ambro: *Complements I, II,* Workshop on Singularities, Linear Systems, and Fano Varieties, NCTS Taipei, April 14 2017

75. C. Anghel: *Freeness, extendability and arrangements* , X. International Symposium: Qunatum Theory and Symmetries, Varna, 19-25 June 2017.

76. C. Anghel: *Freeness of arrangements and extendability of bundles* , International Conference on Recent Trends in Pure and Applied Mathematics, Alba-Iulia, 31 July-4 August 2017.

77. C. Anghel: *Special bundles and superstrings* , The 25-th Conference on Applied and Industrial Mathematics - CAIM 2017, Iaşi, 14-17 September 2017.

78. O. Păsărescu: *On the Riemann Hypothesis: an aproach using Algebraic Geometry and Non-standard Analysis*, International Conference on Didderential Geometry, UPG Ploiesti, Romania, 26-29 septembrie 2017.

79. D. Matei: *Analytic and topological torsion*, University of Luxembourg, Geometry Seminar, January 2017.

80. V. Brinzănescu: *Moduli of vector bundles on ruled surfaces*, Commutative Algebra meeting Algebraic Geometry- A conference in honor of Dorin Popescu's 70th birthday, Bucuresti, Iunie 23-28.

81. M. Aprodu: *Ulrich bundles on projective surfaces*, Séminaire Méditerranéen de Géométrie Algébrique, Univ. Nice, 16 – 17 martie 2017

82. M. Aprodu: *Syzygies and secant loci*, Modern Algebra and Classical Geometry, Trento, 21 – 24 iunie 2017

83. M. Aprodu: *Ulrich bundles on projective surfaces*, Commutative Algebra meeting Algebraic Geometry, Universitatea din Bucureşti, 23 – 28 iunie 2017

84. M. Aprodu: *Minicourse on syzygies*, The 25th National School of Commutative Algebra, Universitatea din Bucureşti, 3 – 9 septembrie 2017

85. M. Aprodu: *Green's conjecture and vanishing of Koszul modules*, North German Algebraic Geometry Seminar (NoGAGS), Humboldt Univ. Berlin, 16 – 17 noiembrie 2017

86. M. Fulger: *Seshadri constants for curve classes*, **Commutative Algebra meeting Algebraic Geometry: Dorin Popescu's 70th birthday**, Bucureşti, 24 Iun - 27 Iun 2017.

87. M. Fulger: *Seshadri constants for curve classes*, **Positivity in Algebraic and Complex Geometry**, Edinburgh, 24 Apr - 28 Apr 2017.

88. M. Fulger: *Seshadri constants for curve classes*, **Basel–EPFL birational geometry meeting**, Basel, Mar 2017.

89. L. Maxim: *Alexander invariants of very affine varieties*, la conferinta "Workshop for Young Researchers in Mathematics", Bucharest, Romania, 17-21 mai 2017.

90. C. Raicu: *Homological invariants of determinantal thickenings*, Instruments of Algebraic Geometry, Bucharest, September 2017.

91. C. Raicu: *Regularity of determinantal thickenings*, The Prospects for Commutative Algebra, Osaka, July 2017.

92. C. Raicu *Regularity of determinantal thickenings*, Commutative Algebra meeting Algebraic Geometry, University of Bucharest, June 2017.

93. C. Raicu *Regularity and cohomology of determinantal thickenings*, Spring Lecture Series, University of Arkansas, March 2017.

94. C. Cobeli: *Experimente matematice*, A XXI-a Conferinţă Anuală a Societăţii de Ştiinţe Matematice din România, Botoşani, 11-14 mai 2017.

95. C. Cobeli, A. Zaharescu: *Order and disorder in integer sequences*, Sesiune comemorativă dedicată mentorului Nicolae Popescu, Bucureşti, Iunie 29, 2017.

96. C. Cobeli: *On the numbers behind some beautiful pictures*, Fifth Bucharest Number Theory Day, July 10-11, 2017.

97. R. Diaconescu: *Specificare şi verificare bazate pe logică*, Academia Română (secţia de ştiinţa şi tehnologia informaţiei), September 2017.

98. R. Diaconescu: *Mathematical Foundations for Conceptual Blending* (invited talk), Working Formal Methods Symposium, Bucharest, Romania, July 2017.

99. F. Nicolae: *On the imaginary quadratic number fields with class group of exponent 4*, Bucharest Number Theory Day, Iunie 2017.

100. F. Nicolae: *On Artin's L-functions*, DMV-Romanian Mathematical Society Meeting, Constanţa, Septembrie 2017.

101. F. Nicolae: *On Artin's L-functions*, Oberseminar Computer Algebra und Zahlentheorie, Universität Paderborn, Noiembrie 2017.

102. R. Gaba: *On a generalization of Ramanujan's congruence II (Cohomological aspects)*, Workshop for Young Researchers in Mathematics - 7th edition, May 17-20, 2017.

103. R. Gaba: *A generalization of a congruence of Ramanujan*, Fifth Bucharest Number Theory Day, July 10-11, 2017.

104. V. Paşol: *Character sums and multiple Dirichlet series*, Joint International Meeting of the German Mathematical Society and the Romanian Mathematical Society, Constanta 16-19 sept 2017

105. M. Prunescu: *Homomorphisms of abelian p-groups and p-automatic sequencesi*, The 13th International Conference on Discrete Mathematics: Discrete Geometry and Convex Bodies, Bucharest (September 4 7, 2017).

106. A. Sipoş: *Proof mining in convex optimization*, PhDs in Logic IX, Bochum, Germania, 2-4 mai 2017.

107. A. Sipoş: *Representable functions in Moisil logic*, FROM 2017, Bucureşti, România, 5-8 iulie 2017.

108. A. Sipoş: *Proof mining in convex optimization*, Logic Colloquium 2017, Stockholm, Suedia, 14-20 august 2017.

109. A. Sipoş: *Playing with the logic of Moisil: nuances, games and representations*, BuCal 2017, Bucureşti, România, 25-27 septembrie 2017.

110. D. Beltiţă: *Reproducing kernels on infinite-dimensional manifolds*, Congreso Bienal de la Real Sociedad Matemática Española, 30 ianuarie - 3 februarie 2017, Facultad de Educación, Universidad de Zaragoza, Spania.

111. D. Beltiţă: *Quasidiagonality of C^*-algebras of generalized $ax + b$ groups*, "XXXVI Workshop on Geometric Methods in Physics", Białowieża, Polonia, 2–8 iulie 2017.

112. D. Beltiţă: *Modular theory and Poisson geometry*, Seminarul de Fizică Matematică, Universitatea din Białystok, Polonia, 21 septembrie 2017.

113. A. Gheondea: *Invariant positive semidefinite kernels*, Universitatea Politehnica, Timişoara, May 17-19, 2017.

114. A. Gheondea: *Symmetry vs Conservation Laws in Dynamical Quantum Systems*, Institut Henri Poincaré, Paris, Worshop "Operator Algebras and Quantum Information Theory", Sept. 11–15, 2017.

115. A. Gheondea: *Weak solutions for a degenerate elliptic problem*, AGH University of Science and Technology, Conference "Spectral Theory and its Applications", Krakow, May 30, June 2, 2017.

116. A. Gheondea: *Operator models of locally C^*-modules*, Université de Galatasaray, Istanbul, "The second Roumanian-Turkish Mathematics Colloquium", Oct. 25–29, 2017.

117. F. Rădulescu: *Operator Algebras and Number Theory*, Joint International Meeting of the German Mathematical Society and the Romanian Mathematical Society, Constanţa, Septembrie 2017.

118. M. Popa: *Applications of non-commutative functions in free probability*, CMI Toulouse, Octombrie 2017

119. M. Popa: *Permutations of entries and asymptotic freeness for some classes of random matrices*, Bazos Seminar of Modern Analysis, Houston, Noiembrie 2017

120. D. Timotin: *Szegö type theorems for truncated Toeplitz operators*, Great Plains Operator Theory Symposium, Fortworth, 22–26 mai 2017.

121. D. Timotin: *A preorder relation for contractions*, AMS Spring Central Sectional Meeting, Bloomington, 1–2 aprilie 2017.

122. D. Timotin: *Beyond truncated Toeplitz operators*, Workshop on Operator Theory and Complex Analysis, Lisabona, 3–6 iulie 2017.

123. D. T. Vuza, R. Frosch, H. Koeberl, I. Rusi Shkupi, M. Vlădescu: *Quantitative Theory of Signal Inversion in RFID*, 3rd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures, Bucuresti, Romania, 12 octombrie 2017 - 14 octombrie 2017.

124. D. T. Vuza, M. Vlădescu: *Studies on the Transient, Continuous and Pulsed Regimes of High Power LEDs*, 3rd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures, Bucuresti, Romania, 12 octombrie 2017 - 14 octombrie 2017.

125. C. Sminchisescu: Invited talk, INRIA, Franta.

126. C. Sminchisescu: Invited speaker, Deep Learning Symposium, Stockholm, Suedia.

127. C. Sminchisescu: Invited speaker, IEEE ICCV 2017, Manifold Learning: from Euclid to Riemann, Italia.

128. C. Sminchisescu: Invited talk: Google Research, Elvetia.

129. F. Nichita: *poster*, The 13-th International Workshop on Differential Geometry and its Applications, UPG Ploiesti, 26–28 septembrie, 2017.

130. D. Cheptea: *Goldman Lie algebra and its role in the theory of knots and 3-dimensional manifolds*, Workshop for Young Researchers in Mathematics, 7th edition, Bucureşti, România, May 17-19, 2017 (expunerea sustinută pe 18 mai)

131. A. Otiman: *Twisted cohomology of LCS solvmanifolds*, Cortona, Italia, 2. 05. 2017.

132. A. Otiman: *Twisted cohomology of LCK manifolds*, Marburg, Germania, 11.10.2017.

133. A. Otiman: *Twisted cohomology of LCK manifolds*, Regensburg, Germania, 25.10.2017.

134. L. David: *Twist, elementary deformation and the KK-correspondence in generalized complex geometry*, Workshop for Young Researchers in Mathematics, IMAR, 17-20 mai 2017.

135. L. David: *Invariant generalized complex structures on Lie groups*, Geometry and PDE's, Universitatea de Vest din Timisoara, 13-14 iunie 2017.

136. A.Măcinic: *Freeness and arrangements of hyperplanes*, Scoala Nationala de Algebra (http://math.univ-ovidius.ro/sna/edition.aspx?itemID=12)). September 3 - September 9, 2017, FMI, Bucharest.

137. C. R. Popescu: *Geometrical and topological aspects of partial configuration spaces* Bucureşti, WYRM, 17 – 20 Mai.

138. C. Vîlcu: *Folding, unfolding, and flattening*, Discrete Geometry Fest 2017, Budapesta, 15-19 mai 2017.

139. C. Vîlcu: *On the geometry of Alexandrov surfaces*, Discrete Geometry and Convexity - Bárány 70, Budapesta, 19-23 iunie 2017.

140. C. Vîlcu: *Envelopes of α-sections*, The 13th International Conference on Discrete Mathematics: Discrete Geometry and Convex Bodies, Bucureşti, 4-7 septembrie 2017.

141. S. Moroianu: *On sums of squared norms of holomorphic functions*, AIC University Iasi, Sep. 2017.

142. L. Ornea: *The canonical foliation of a Vaisman manifold*, Université Libre de Bruxelles, februarie 2017.

143. L. Ornea: *New results in LCK geometry*, Higher School of Economics, Moscova, aprilie 2017.

144. L. Ornea: *New results in LCK geometry, I, II*, Univ. din Firenze, iunie 2017.

145. R. Pantilie, *Morphisms in differential geometry*, IMAR Monthly Lectures, April 2017.

146. M. Pilca: *Holonomy Groups of Locally Conformally Kähler Metrics*, Workshop Femei in Geometrie, Max Planck Institut, Bonn, 4 aprilie 2017.

147. M. Pilca: *Kähler metrics in a conformal class*, Seminarul de Geometrie Diferentiala, Universitatea Greifswald, 28 iunie 2017.

148. M. Pilca: *Introduction to Locally Conformally Kähler Manifolds*, scoala de toamna, Universitatea Marburg , 10-13 octombrie 2017.

149. I. Popescu: *Optimal alignments and Tracy-Widom distribution*, Constanţa (Oct 2017)

150. I. Popescu: *Deterministic Distance couplings of Brownian motions on Manifolds*, Bucharest (Sept. 13-14, 2017)

151. I. Popescu: *Deterministic Distance couplings of Brownian motions on Manifolds*, Bonn, Spet 3-8

152. I. Popescu: *Deterministic Distance couplings of Brownian motions on Manifolds*, Luxembourg, July, 10–14, 2017.

8 Alte activităţi

8.1 Conducere granturi

1. S. Burciu: Director al grantului PN-III-P4-ID-PCE-2016-015 nr 54 din 12/07/2017.

2. N. Bonciocat: Responsabil temă de cercetare în echipa *Equations diophantiennes* în cadrul GDRI ECO-Math (Groupement de Recherche International en Matématiques visant l'Europe Centrale et Orientale - Director proiect: Radu Purice)

3. A. L. Agore: Grant postdoctoral, Fonds voor Wetenschappelijk Onderzoek - Vlaanderen (FWO), Belgia, Octombrie 2014 - prezent.

4. D. Ionescu-Kruse: *A qualitative description of travelling shallow water waves with constant vorticity*- proiect in cadrul Groupement de Recherche International (GDRI)
Partener: Denys Dutykh, LAMA, UMR 5127 CNRS, Université Savoie Mont Blanc, Franţa.

5. D. Ionescu-Kruse: Facultatea de Matematică, University of Vienna, Austria, 22/06/2017 - 21/07/2017.

6. D. Ionescu-Kruse: Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, în cadrul programului "Nonlinear water waves", 05/08/2017 - 19/08/2017

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

8. E. Mihăilescu: Director proiect PN III-P4-ID-PCE-2016-0823, "Dinamica si Teorie Ergodica Diferentiabila", de la UEFISCDI.

9. E. Mihăilescu: Grant "Ergodic theory on fractals", Institut des Hautes Études Sciéntifiques, Bures-sur-Yvette, France, 2 luni 2017.

10. E. Mihăilescu: Grant Institut Mittag-Leffler, Stockholm, Sweden, 4 saptamani, Fall 2017.

11. L. Ignat: PN-II-RU-TE- 2014-4-0007, CNCS-UEFISCDI

12. R. Purice: Le Groupement de Recherche International ECO-math - GDRI

13. V. Rădulescu: *Qualitative and numerical analysis of nonlinear problems on fractals*, Grant CNCS Idei (CNCS PCE-47/2011)

14. V. Rădulescu: *Sisteme de asigurare a securitatii informatiei bazate pe modele neliniare de analiza a fluxului informational*. Grant CNCS (CNCS PN-II-PT-PCCA-2013-4-0614)

15. V. Rădulescu: *Analiza calitativă şi numerică a unor clase de sisteme diferenţiale anizotrope şi aplicaţii*, Grant CNCS (PN-III-P4-ID-PCE-2016-0130)

16. A. Zărnescu: 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* 2015-2017

17. A. Zărnescu: Co-investigator pe grantul *Liquid crystal defects in Landau-de Gennes Theory*, grant Leverhulme, UK-2015-2017

18. L. Maxim: *Singular Spaces in Geometry and Topology*, grant cercetare, National Science Foundation (USA), 09/2013 - 08/2017.

19. L. Maxim: *Stratified spaces in geometric and computational topology and physics*, grant conferinta, National Science Foundation (USA), 2015 - 2017.

20. C. Raicu: NSF Award DMS - 1600765.

21. R. Răsdeaconu: Grant de cercetare cu titlul "Deformation techniques in real enumerative geometry and Kähler geometry" din partea "Simons Foundation", SUA (Award Number: 281266). 2013-2018.

22. R. Răsdeaconu: Grant NSF (DMS - 1711567) pentru organizarea conferinţei *The Topology of Real Algebraic Varieties: Deterministic and Random Aspects*, Shanks Workshop, March 11-12, 2017, Vanderbilt University.

23. R. Diaconescu: Director grant PN-III-P2-2.1-PED-2016-0494 - *Formal Verification of Reconfigurable Systems*

24. M. Leordeanu: Director grant ERC-2016-0007 *The Classifier Graph: A Recursive Multi-class Network for Deep Category Recognition in Images and Video*

25. M. Leordeanu: PED-2016-1842 *Automatic linguistic descriptions of objects, people and their interactions in indoor videos*

26. V. Paşol: PN-II-RU-TE-2014-4-2077 *Galois Representations and Modular Forms*

27. Ingrid Beltiţă: director al proiectului *Harmonic Analysis on Solvable Lie Groups*, grant CNCS-UEFISCDI, cod RU-TE-2014-4-0370, desfăşurat in perioada octombrie 2014-septembrie 2017.

28. C. Sminchisescu: *Metode de invatare pentru recunoasterea vizuala activa* (180 KE).

29. C. Sminchisescu: *Metode pentru recunoasterea tri-dimensionala a obiectelor* (350 KE).

30. C. Sminchisescu: *Modelarea cu acuratete a persoanelor in video* (250 KE / 550 KE).

31. C. Sminchisescu Interactiunea multi-modala om-robot pentru imbunatatirea imaginatiei la copiii cu autism (450 KE/4 ME).

32. C. Călinescu: *Collaboration Grants for Mathematicians*, Investigator principal, Simons Foundation, 2014-2019.

33. C. Călinsecu PSC-CUNY grant TRADA-48-211, Investigator principal, 2017-2018.

34. L. David: Director proiect, *Geometrii speciale si structuri asociate*, cod proiect PN-III-ID-PCE-2016-0019, 2017-2019.

35. S. Moroianu: Director proiect, *Volumul varietatilor hiperbolice si Einstein*, Grant 0330/2017, PN-III-P4-ID-PCE-2016-0330, 2017-2019.

36. L. Ornea: *Topics in LCK geometry*, Program PNCDI III, PN-III-P4-ID-PCE-2016-0065, Contract nr. 8/12.07.2017.

8.2 Activităţi în cadrul granturilor

- M. Leordeanu: *Efficient Unsupervised Object Discovery and Segmentation in Video*, DeepMind, London, September 2017.
- M. Leordeanu: *Unsupervised Object Discovery and Learning from Video*, International Summer School on Imaging for Medical Applications, July 2017.
- M. Leordeanu: *Unsupervised Learning of Objects in Video*, 1st Conference on Recent Advances in Artificial Intelligence, RAAI, June 2017.
- M. Leordeanu: *Visual Recognition Machines - When Computers Learn to See like Humans*, The 15th Congress of the Romanian Society of Neurology, Bucharest, Romania, May 2017.
- M. Leordeanu: *When AI meets Medicine*, Healthcare, Education and Research Talks Heart International Conference, Cluj-Napoca, April 2017.

8.3 Conducere doctorate

- M. Staic: Conducător doctorat - Jake Laubacher, Bowling Green State University, teza susţinută Martie 2017.
- L. Beznea: Conducător doctorat - Tatiana Ignat, IMAR, teza susţinută Noiembrie 2017.
- D. Popescu: Conducător doctorat - Z. Kosar, A. Khalid, GCU Lahore.
- E. Mihăilescu: Conducator doctorat - Rodica Marineac, IMAR.
- L. Ignat: Co-tutela impreuna cu Liviu Marin, studenta Andreea Grecu, Universitatea Bucuresti.
- R. Purice: Conducător doctorat pentru Alexandru Mustăţea, admis in 2015.
- D. Tiba: Conducător doctorat - Roxana Nicolai (Matei), IMAR,teza sustinuta Noiembrie 2017
- V.D. Rădulescu: trei doctoranzi (anul II) la universitatea din Craiova.
- A. Zărnescu: Conducator de doctorat pentru Stuart Day (2013-2017) la Universitatea Sussex, UK.
- V. Brinzanescu: un doctorand la SCOSAR (Academia Română).
- M. Aprodu: Conducător doctorat - Filip Chindea, Universitatea din Bucureşti (din octombrie 2016).
- M. Aprodu: Conducător doctorat - Laura Filimon - Universitatea din Bucureşti (din octombrie 2017).
- M. Aprodu: Conducător doctorat - Ştefan Deaconu - Universitatea din Bucureşti (din octombrie 2017)
- L. Maxim: Conducător doctorat - Eva Elduque, anul IV, University of Wisconsin-Madison (USA)
- L. Maxim: Conducător doctorat - Christian Geske, anul IV, University of Wisconsin-Madison (USA)
- L. Maxim; Conducător doctorat - Fenglin Li, anul II, University of Science and Technology of China (China)
- C. Raicu: Conducător doctorat - Michael Perlman, University of Notre Dame, începând din 2015.
- C. Raicu: Conducător doctorat - Zhao Gao, University of Notre Dame, începând din 2017.
- L. Leuştean: Conducător doctorat - Andrei Sipoş, teza susţinutăîn Noiembrie 2017.
- A. Gheondea: Conducător doctorat - S. Ay, din 2015.

- M. Popa: Conducător doctorat - Zhiwei Hao, va sustine teza in decembrie 2017.
- C. Sminchisescu Abilitare (Universitatea din Bonn, 2007), echivalata automat prin ordin MEC, 2013
- C. Sminchisescu Incadrant a 6 doctoranzi.
- L. Ornea: Conducător doctorat - Alexandra Otiman, Universitatea din Bucureşti, teza susţinută Septembrie 2017.
- L. Ornea: Conducător doctorat - Miron Stanciu, Universitatea din Bucureşti,
- I. Popescu: Conducător doctorat - Emilian Paraicu (Oct. 2017)
- I. Popescu: Conducător doctorat - Adriana Nistor (Oct. 2017)

8.4 Membru în colective editoriale

- M. Cipu: Editor la: Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie, Gazeta Matematică, Seria A
- C. Nastasescu: Editor la: 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).
- L. Beznea: Editor la: Ann. Univ. Bucureşti, Editura Univ. din Bucureşti, Advances in Pure and Applied Mathematics, De Gruyter, Revue Roumaine Math. Pures Appl., Math. Reports, (co-editor şef), Editura Academiei Romane, Proc. Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, Editura Academiei Romane
- M. Colţoiu: Editor la: Acta Math. Apulensis, Proc. Rom. Academy
- C. Ionescu: Editor la: Asia Mathematika
- C. Joiţa: Secretar stiintific al comitetului de redactie la Mathematical Reports si Revue Roumaine De Mathématiques Pures et Appliquées
- E. Mihăilescu: Editor la: Discrete and Continuous Dynamical Systems - S.
- V. Drăgan: Editor la: International Journal of Innovative Computing, Information and Control, ICIC-Express Letters, IET Control Theory and Applications, IMAJOR - Innovativity in Modeling and Analytics Journal of Research.
- V. Rădulescu: Editor la: Mathematics in Science and Engineering, Book Series, Academic Press (an imprint of Elsevier), Advances in Nonlinear Analysis (Walter de Gruyter)(editor-şef), Nonlinear Analysis: Theory, Methods & Applications, Journal of Mathematical Analysis and Applications, Complex Variables and Elliptic Equations, Boundary Value Problems, Electronic Journal of Differential Equations, de Gruyter–Versita Book Publishing Program in Mathematics, Advances in Pure and Applied Mathematics (Walter

de Gruyter), Discrete and Continuous Dynamical Systems, Series S (American Institute of Mathematical Sciences), Opuscula Mathematica (Krakow University), MATHlics Research Paper Series Applied MATHematics JournaL for EconomICS, (edited by MEDAlics–Research Centre on Mediterranean Relations), Journal of Numerical Analysis and Approximation Theory (Romanian Academy), Ann. St. Univ. Ovidius Constanta, Annals of the University of Craiova - Mathematics and Computer Science Series(editor-şef).

- V. Brinzanescu: Editor şef la: Revue Roumaine Math. Pures Appl. şi Math. Rep. până la 30.06.2017.
- V. Brinzanescu: Editor la: Serdica Math J., Proc. Rom. Acad., Bull. Math.SSMR, Bull. UPB, An. Univ. Ovidius Constanta.
- M. Aprodu: Editor la: Revue Roumaine Math. Pures Appl., Math. Reports.
- L. Maxim: Editor la: *Mathematics* (open access journal).
- R. Diaconescu: Editor la: Studies in Universal Logic, book series at Springer Basel, Switzerland.
- M. Leordeanu: Editor la: Machine Vision and Applications.
- V. Timofte: Editor la: Australian Journal of Mathematical Analysis and Applications (AJMAA).
- D. Beltiţă: Editor la: Analele Ştiinţifice ale Universităţii ,,Al.I.Cuza" din Iaşi —Matematică.
- A. Gheondea: Editor la: Journal of Operator Theory, Complex Analysis and Operator Theory, Opuscula Mathematica, Journal of Function Spaces.
- F. Rădulescu: Editor la: Journal of Operator Theory, Liberthas Mathematicae.
- D. Timotin: Editor la: Journal of Operator Theory, Revue Roumaine de Mathématiques Pures et Appliquées, Mathematical Reports, Analele Ştiinţifice ale Universităţii "Alexandru Ioan Cuza" din Iaşi, Matematică.
- C. Sminchisescu: Editor la: IEEE Transaction on Pattern Analysis and Machine Intelligence.
- F. Nichita: Editor la: Axioms, MDPI, Basel.
- C. Popescu: Editor la: Gazeta Matematică — Seria A, Romanian Mathematical Competitions Series.
- L. Ornea: Editor la: Bull. Math. Soc. Sci. Math. Roumanie, Math. Reports, Revue Roum. Math. Pures Appl.
- St. Papadima: Editor la: Revue Roumaine de Mathématiques Pures et Appliquées, Mathematical Reports.

8.5 Lucrări acceptate la publicat

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8.7 Cooperări ştiinţifice

- Reţeaua de tip GDRI-*Eco-Math* organizată de CNRS(Franţa) în colaborare cu Academia de Ştiinţe din Ungaria şi Academia Română (2017-2020).
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- Radu Purice: cercetător invitat la Univ. Alborg(Danemarca), Univ. de Chile(Chile).
- Delia Ionescu-Kruse: cercetător invitat Univ. Viena(Austria) şi Isaac Newton Institute for Mathematical Sciences, Cambridge (Marea Britanie).
- Delia Ionescu-Kruse: in cadrul GDRI, colaborare cu Denys Dutykh, LAMA, UMR 5127 CNRS, Université Savoie Mont Blanc, Franţa.
- Ruxandra Stavre: cercetător invitat la Institute Camille Jordan UMR CNRS 5208, Saint-Etienne, Franţa.
- Dan Timotin: profesor invitat la Indiana Univ., Bloomington, SUA.
- Dan Vuza: colaborare cu firma Freaquent Frosch Electronics GmbH (Graz, Austria) pe tema sistemelor de comunicatie pentru transpondere RFID.