



## RAPORT DE ACTIVITATE

(01.07.2020–30.06.2024)

### Centrul de Cercetare în Matematică și Aplicații

#### I. Datele de identificare ale centrului:

- a) denumirea (în limba română): **Centrul de Cercetare în Matematică și Aplicații**
- b) denumirea (în limba engleză): **Research Center in Mathematics and Applications**
- c) acronimul centrului: **RCMA**
- d) website: <https://stiinte.ulbsibiu.ro/cercetare/rcma/>
- e) data înființării și/sau data ultimei recunoașteri prin hotărâre de Senat: 10.02.2014/29.05.2020
- f) facultatea în subordinea căreia se află centrul: **Facultatea de Științe**
- g) tipul de cercetare pe care îl desfășoară centrul (fundamentală/ aplicativă/ creație artistică și promovarea culturii): **fundamentală/ aplicativă**
- h) domeniile de cercetare ale centrului (în funcție de tipul de cercetare realizată): **matematică și informatică**

#### II. Structura și organigrama centrului (la momentul raportării):

- a) Structura centrului (*se vor preciza: compartimentele/laboratoarele din cadrul centrului; pozițiile de conducere, persoanele care ocupă funcțiile respective*):

**Director:** Conf. univ. dr. Daniel Florin Sofonea

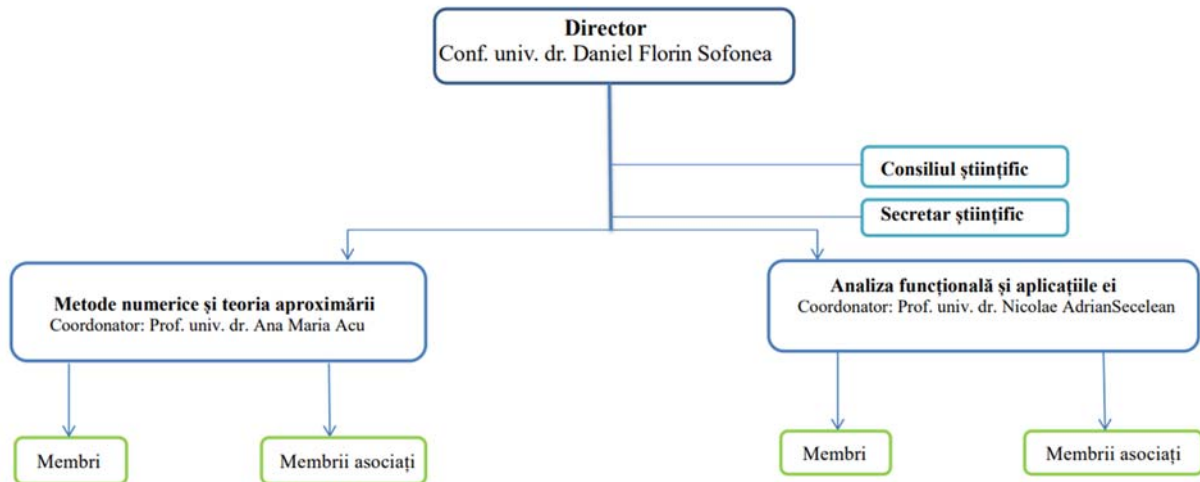
**Consiliul științific:** Prof. univ. dr. Ana Maria Acu, Prof. univ. dr. Nicolae Adrian Secelean, Prof. univ. dr. Laurian Suci

**Secretar științific:** Lector univ. dr. Augusta Rațiu

**Coordonator „Metode numerice și teoria aproximării”:** Prof. univ. dr. Ana Maria Acu

**Coordonator „Analiză funcțională și aplicațiile ei”:** Prof. univ. dr. Nicolae Adrian Secelean

- b) Organigrama centrului (*se va insera organigrama centrului*):



**III. Lista membrilor centrului** (la momentul raportării; se vor preciza: gradul didactic/de cercetare; numele și prenumele; laboratorul/compartimentul):

Membri:

1. Conf. univ. dr. Sofonea Daniel Florin, grupul "Metode numerice și teoria aproximării"
2. Prof. univ. dr. Acu Ana Maria, grupul "Metode numerice și teoria aproximării"
3. Conf. univ. dr. Branga Adrian, grupul "Metode numerice și teoria aproximării"
4. Lector univ. dr. Țincu Ioan, grupul "Metode numerice și teoria aproximării"
5. Lector univ. dr. Sorea Miruna Ștefana, grupul "Metode numerice și teoria aproximării"
6. Prof. univ. dr. Acu Dumitru, grupul "Metode numerice și teoria aproximării"
7. Prof. univ. dr. Popa C. Emil, grupul "Metode numerice și teoria aproximării"
8. Drd. Pepenar Alin, grupul "Metode numerice și teoria aproximării"
9. Drd. Pașca Sergiu Vlad, grupul "Metode numerice și teoria aproximării"
10. Chivu Georgian Cristian, grupul "Metode numerice și teoria aproximării"
11. Ilina Mihai, grupul "Metode numerice și teoria aproximării"
12. Prof. univ. dr. Secelean Nicolae Adrian, grupul "Analiza funcțională și aplicațiile ei"
13. Prof. univ. dr. Acu Mugur, grupul "Analiza funcțională și aplicațiile ei"
14. Prof. univ. dr. Suciuc Laurian, grupul "Analiza funcțională și aplicațiile ei"
15. Prof. univ. dr. Drăghici Eugen, grupul "Analiza funcțională și aplicațiile ei"
16. Lector univ. dr. Rațiu Augusta, grupul "Analiza funcțională și aplicațiile ei"
17. Lector univ. dr. Totoi Alina, grupul "Analiza funcțională și aplicațiile ei"

Membrii asociați:

1. Prof. univ. dr. Rașa Ioan, grupul "Metode numerice și teoria aproximării"
2. Prof. univ. dr. Gonska Heiner, grupul "Metode numerice și teoria aproximării"

3. Prof. univ. dr. Gupta Vijay, grupul “Metode numerice și teoria aproximării”
4. Prof. univ. dr. Agrawal Purshottam, grupul “Metode numerice și teoria aproximării”
5. Conf. univ. dr. Muraru Carmen Violeta, grupul “Metode numerice și teoria aproximării”
6. Lector univ. dr. Radu Voichița Adriana, grupul “Metode numerice și teoria aproximării”
7. Conf. univ. dr. Minculete Nicușor, grupul “Analiza funcțională și aplicațiile ei”

#### IV. Planul de activități al centrului în perioada 2020-2024:

Nr. crt.	Obiective	Activități	Indicatori de rezultat	Ponderea obiectivului în activitatea centrului
1.	O1: Publicarea rezultatelor cercetării	A1: Analiza permanentă a standardelor internaționale de clasificare a publicațiilor A2: Elaborarea de rapoarte anuale de activitate a centrului de cercetare	R1: publicare articole (20 articole)	60 %
2.	O2: Proiecte de cercetare	A1: Analiza metodologiilor de aplicare în vederea obținerii finanțării A2: Formarea echipei de implementare a proiectului A3: Întocmirea documentației necesare pentru obținerea finanțării	R1: participarea la competiții și câștigarea proiectelor de cercetare (depunere 8 proiect)	20 %
3.	O3: Noi colaborări cu instituții/rețele academice de prestigiu pe plan internațional	A1: Stabilirea contactelor cu persoanele din instituțiile colaboratoare A2: Încheierea de protocoale/acorduri de colaborare cu noii parteneri A3: Participarea la evenimente științifice organizate de parteneri A4: Organizarea de evenimente științifice	R1: încheierea de noi colaborări/ parteneriate (5 parteneriate) R2: Participare la conferințe sau workshopuri (10 conferințe) R3: Organizarea de evenimente științifice (4 evenimente)	20 %

#### V. Rezultatele activității de cercetare (2020-2024):

1. Proiecte CDI câștigate în perioada 2020-2024 (internaționale / naționale / locale / individuale): -
2. Alte categorii de activități prin care s-au atras finanțări (proiecte Erasmus+, alte tipuri de proiecte, contracte cu terții, donații, sponsorizări etc.):

 2020

- A. M. Acu, Project "LBUS-HPI-ERG-2020-04/Adaptive preferences and natural price on the financial market-a co-evolutionary model", contract no. 2724/16.12.2020, COR code 241301 (scientific researcher I)
- A. M. Acu, Project "LBUS-HPI-ERG-2020-07/Development of advanced numerical algorithms and robust calculation protocols for the dimensional and structural characterization of nanostructures", contract no. 4530/19.11.2021, COR code 212023 (scientific researcher I)
- A. N. Branga, Research grants LBUS-IRG-2020, financed from Lucian Blaga University of Sibiu, New results of fixed point theory on ordered algebraic structures, Project Director, 2018-2020
- D. F. Sofonea, Research grants LBUS-IRG-2020-06 financed from Lucian Blaga University of Sibiu: Title: Operators preserving exponential type functions and Voronovskaya type results, 2020, contract no. 2837/16.07.2020, Project Manager.
- L. Suciu, Research grants LBUS-IRG-2020-06 financed from Lucian Blaga University of Sibiu : Title: Expansive dilations for operators on Hilbert spaces, Project Manager
- L. Suciu, Project "LBUS-HPI-ERG-2020-07 - "Development of advanced numerical algorithms and robust calculation protocols for the dimensional and structural characterization of nanostructures", contract no. 4530/19.11.2021, COR code 212023 (scientific researcher I), member

#### 2021

- A. M. Acu, Research grants LBUS-IRG-2021-07, financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants (Iterates and invariant measures for Markov operators), Project Director
- A. M. Acu, "Know-how transfer for excellent research at ULBS" project, code: CNFIS-FDI-2021-0030, COR code 242401, Training expert
- A. M. Acu, "PYTHAGORAS" project, project code no. 2021-1-RO01-KA220-HED-000032258, COR code 235104, Education expert
- A. Ratiu, Research grants LBUS-IRG-2021-07, financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants, Bergstrom inequality and new bounds for statistical indicators, Project Director
- A. N. Branga, Research grants LBUS-IRG-2021, financed from Lucian Blaga University of Sibiu, Some fixed point results in spaces with deflected metrics, Project Director 2021-2024

- D. F. Sofonea, Research grants LBUS-IRG-2021-07 financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants, Differences of positive linear operators, Project Manager, 2021.
- L. Suci, Research grants LBUS-IRG-2021-07 financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants, Extensions of operators and perturbations of the maximal function related to the intertwining expansion problem for contractions, Project Manager

 2022

- A. M. Acu, Research grants LBUS-IRG-2022-08, financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants, Discrete probability distributions and some applications, Director
- A. M. Acu, "FORTHM-Fostering Outreach within European Regions, Transnational Higher Education and Mobility" project, code 101089463, Grant Agreement no. 101089463/19.10.2022, COR code 235104, Educational expert WP 8 senior
- A. Ratiu, Project "PYTHAGORAS", Erasmus +, project number: 2021-1-RO01-KA220-HED-000032258, Education expert 1.02.2022 – 31.01.2025
- A. Ratiu, Research grants LBUS-IRG-2022-08, financed from Lucian Blaga University of Sibiu, Measuring the levels of digital skills by statistical indicators, Project Director
- A. N. Branga, Research grants LBUS-IRG-2022, financed from Lucian Blaga University of Sibiu, Generalized perturbed contractions with related fixed point results, Project Director 2022-2025
- D. F. Sofonea, Research grants LBUS-IRG-2022-08 financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants, Some Results on Semi Exponential Post-Wider operators, Project Manager, 2022.
- L. Suci, Research grants LBUS-IRG-2022-08 financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants, Asymptotic properties for compressions of two isometries and Wold decompositions, Project Manager, 2022.

 2023

- A. M. Acu, Research grants LBUS-IRG-2023, financed from Lucian Blaga University of Sibiu, Voronovskaja formula for Aldaz-Kounchev-Render operators, contract Nr. 3509/24.07.2023, Director
- A. M. Acu, Project financed by Lucian Blaga University of Sibiu (Knowledge Transfer Center) & Hasso Plattner Foundation research grants LBUS-HPI-ERG-2023-01, Operatori liniari pozitivi: noi provocari, noi aplicatii, contract nr. 3190/03.07.2023, Director

- A. M. Acu, Romania's National Recovery and Resilience Plan PNRR-III-C9-2022 - I8, Mathematical Methods and Models for Biomedical Applications (Ma.Me.Mo.Bi.A.), Contract no.760076/23.05.2023, CF125/15.11.2022, Executive Manager and Scientific Resercher I
  - A. Ratiu, Project "Mathematical Methods and Models for Biomedical Applications" (Ma.Me.Mo.Bi. A.), Scientific Resercher III, Member 1.07.2023-30.06.2026
  - A. Ratiu, Project "Operatori liniari pozitivi: noi provocari, noi aplicatii", Scientific Researcher, Member 3.07.2023-30.06.2025
  - A. Ratiu, Research grants LBUS-IRG-2023, financed from Lucian Blaga University of Sibiu, A scale to measure entrepreneurship competence based on the EntreComp framework, Project Director
  - A. N. Branga, Research grants LBUS-IRG-2023, financed from Lucian Blaga University of Sibiu, New results regarding the existence of fixed points for contractions defined on cone metric spaces over topological modules, Project Director 2023-2026
  - M.-S. Sorea, Project "Mathematical Methods and Models for Biomedical Applications (Ma.Me.Mo.Bi.A.)", investiția "Dezvoltarea unui program pentru atragerea resurselor umane înalt specializate din străinătate în activități de cercetare, dezvoltare și inovare" PNRR-III-C9-2022 – I8, contract no. 760076/23.05.2023, code CF. 125/15.11.2022, Postdoctoral researcher
  - M. Acu, Project financed by Lucian Blaga University of Sibiu (Knowledge Transfer Center) & Hasso Plattner Foundation research grants LBUS-HPI-ERG-2023-01, Operatori liniari pozitivi: noi provocari, noi aplicatii, contract nr. 3190/03.07.2023, member
  - L. Suciu, Research grants LBUS-IRG-2023 financed from Lucian Blaga University of Sibiu, Brownian extensions and liftings for bounded linear operators on Hilbert spaces, Project Manager
  - S. V. Pașca, Romania's National Recovery and Resilience Plan PNRR-III-C9-2022 - I8, Mathematical Methods and Models for Biomedical Applications (Ma.Me.Mo.Bi.A.), contract no. 760076/23.05.2023, CF125/15.11.2022, Software Developer
- 🚩 2024
- A. M. Acu, Project Regional Inclusive Biobased Entrepreneurship Solutions" (RIBES), Project 101134911 (HORIZON, REA.B-Green Europe), contract no. 10455/24.05.2024, member

3. Reviste editate de către centrul de cercetare:

- 🚩 General Mathematics, <https://generalmathematics.ro/>, ISBN 1221-5023, ISSN 1584-3289.

4. Articole publicate reviste de specialitate din țară și străinătate (cu precizarea categoriilor: Web of Science/ Scopus/ ERIH+/ alte baze de date internaționale):

✚ 2020

- A. M. Acu, M. Heilmann, I. Rasa, Strong Converse Results for Linking Operators and Convex Functions, *Journal of Function Spaces*, Volume 2020, article no. 4049167, 2020, Web of Science
- A. M. Acu, I. Rasa, Elementary hypergeometric functions, Heun functions, and moments of MKZ operators, *Revista de la Real Academia de Ciencias Exactas Fisicas Y Naturales Serie A-Matematicas*, Volume 115, no. 1, 2020, Web of Science
- A. M. Acu, I. Rasa, A C-0-Semigroup of Ulam Unstable Operators, *Symmetry-Basel*, Volume 12, no. 11, 2020, Web of Science
- A. M. Acu, A. Maduta, D. Otrocol, I. Rasa, Inequalities for Information Potentials and Entropies, *Mathematics*, Volume 8, no. 11, 2020, Web of Science
- A. M. Acu, H. Gonska, Perturbed Bernstein-type operators, *Analysis and Mathematical Physics*, Volume 10, no. 4, 2020, Web of Science
- A. M. Acu, M. Dancs, V. A. Radu, Representations for the inverses of certain operators, *Communications on Pure and Applied Analysis*, Volume 19, no. 8, 2020, 4097-4109, Web of Science
- A. M. Acu, G. Bascanbaz-Tunca, Approximation by Complex Perturbed Bernstein-Type Operators, *Results in Mathematics*, Volume 75, no. 3, article no.120, 2020, Web of Science
- A. M. Acu, I. Rasa, Ulam Stability for the Composition of Operators, *Symmetry-Basel*, Volume 12, no. 7, article no. 1159, 2020, Web of Science
- A. M. Acu, G. Bascanbaz-Tunca, N. Cetin, Approximation by certain linking operators, *Annals of Functional Analysis*, Volume 11, no. 4, 1184-1202, 2020
- A. M. Acu, M. Heilmann, I. Rasa, Iterates of convolution-type operators, *Positivity*, Volume 25, 495-506, 2020
- A. M. Acu, L. Hodis, I. Rasa, Multivariate weighted Kantorovich operators, *Mathematical Foundations of Computing*, Volume 3, no. 2, 117-124, 2020
- V. Gupta, A. M. Acu, H. M. Srivastava, Difference of Some Positive Linear Approximation Operators for Higher-Order Derivatives, *Symmetry-Basel*, Volume 12, no. 6, article no. 915, 2020, Web of Science
- A. M. Acu, S. Hodis, I. Rasa, Estimates for the Differences of Certain Positive Linear Operators, *Mathematics*, Volume 8, no. 5, article number 798, 2020, Web of Science
- T. Neer, A. M. Acu, P. N. Agrawal, Baskakov-Durrmeyer type operators involving generalized Appell Polynomials, *Mathematical Methods in the Applied Sciences*, Volume 43, no. 6, 2911-2923, 2020, Web of Science

- P. N. Agrawal, A. M. Acu, R. Ruchi, q-Generalized Bernstein-Durrmeyer Polynomials, Journal of Mathematical Inequalities, Volume 14, no. 1, 211-235, 2020, Web of Science
- A. M. Acu, I. Rasa, Estimates for the differences of positive linear operators and their derivatives, Numerical algorithms, Volume 85, no. 1, 191-208, 2020, Web of Science
- E.-L. Pop, D. Duca, A. Ratiu, Calculus for the intermediate point associated with a mean value theorem of the integral calculus, General Mathematics, Volume 28, no. 1, 59-66, 2020, Sciendo, EBSCO, Index Copernicus <https://generalmathematics.ro/volume-28-no-1-2020/>
- A. Ratiu, N. Minculete, About Aczel inequality and some bounds for several statistical indicators, Mathematics, Volume 8, no. 4, 574, 2020, Web of Science  
<https://www.mdpi.com/2227-7390/8/4/574>
- I. Maniu, E.-L. Pop, A. Ratiu, E. T. Stefanescu, Insights from IT jobs market with text mining, SEA-Practical Application of Science, Volume 8, no. 24, 287-298, 2020, EBSCO, DOAJ  
<https://spas.seaopenresearch.eu/volume-viii#>
- M. Acu, G. Oros, Starlikeness Condition for a New Differential-Integral Operator, Mathematics, Volume 8, no. 5, 2020, Web of Science
- A. N. Branga, I.M. Olaru, An application of the fixed point theory to the study of monotonic solutions for systems of differential equations, Mathematics, Volume 8, no. 7, article no. 1183, 1-8, 2020, Web of Science
- A. N. Branga, I. M. Olaru, Cone metric spaces over topological modules and fixed point theorems for Lipschitz mappings, Mathematics, Volume 8, no. 5, article no. 724, 1-14, 2020, Web of Science
- M. S. Sorea, Constructing separable Arnold snakes of Morse polynomials, Portugaliae Mathematica, Volume 77, no. 2, 219-260, 2020  
<https://ems.press/journals/pm/articles/17210>
- T. O. Çelik, F. Galuppi, A. Kulkarni, M. S. Sorea, On the eigenpoints of cubic surfaces, Le Matematiche (Catania), Volume 75, no. 2, 611-625, 2020  
<https://lematematiche.dmi.unict.it/index.php/lematematiche/article/view/2003>
- L. Suciú, Liftings and extensions of operators in Brownian setting, Linear and Multilinear Algebra, 1-18, 2020, Web of Science <https://doi.org/10.1080/03081087.2020.1819948>
- L. Suciú, On operators with two-isometric liftings, Complex Analysis and Operator Theory, Volume 14, article no. 5, 1-16, 2020. <https://doi.org/10.1007/s11785-019-00960-9>
- W. Majdak, L. Suciú, Brownian type parts of operators in Hilbert spaces, Results in Mathematics, Volume 75, no. 5, 1-23, 2020, Web of Science <https://doi.org/10.1007/s00025-019-1130-8>

- F. Sofonea Florin, I. Tincu, On an Inequality for Legendre Polynomials, *Mathematics*, Volume 8, no. 11, 1-11, 2020, Web of Science
- N. A. Secelean, A New Kind of Nonlinear Quasicontractions in Metric Spaces, *Mathematics*, Volume 8, no. 5, 1-10, 2020, Web of Science
- N. A. Secelean, D. Wardowski, Expansive mappings on bounded sets and their application to rational integral equations, *Revista de la Real Academia de Ciencias Exactas Fisicas y Naturales Serie A-Matematicas*, Volume 114, no. 3, 2020, Web of Science

 2021

- A. M. Acu, I. Rasa, Iterates and Invariant Measures for Markov Operators, *Results Math.*, Volume 76, no. 4, article no. 218, 2021, Web of Science
- P. N. Agrawal, A. M. Acu, N. Bhardwaj, Quantitative Voronovskaya type results for a sequence of Stancu type operators, *Journal of Mathematical Inequalities*, Volume 15, no. 4, 1519–1532, 2021, Web of Science
- P. N. Agrawal, A. M. Acu, R. Chauhan, T. Garg, Approximation of Bogel continuous functions and deferred weighted A-statistical convergence by Bernstein-Kantorovich type operators on a triangle, *Journal of Mathematical Inequalities*, Volume 15, no. 4, 1695–1711, 2021, Web of Science
- A. M. Acu, G. Tachev, Yet Another New Variant of Szasz–Mirakyan Operator, *Symmetry*, Volume 13, no. 11, 2021, Web of Science
- V. Bratian, A. M. Acu, C. Oprean-Stan, E. Dinga, G. M. Ionescu, Efficient or Fractal Market Hypothesis? A Stock Indexes Modelling Using Geometric Brownian Motion and Geometric Fractional Brownian Motion, *Mathematics*, Volume 9, no. 22, 2021, Web of Science
- A. M. Acu, I. Rasa, R. Srivastava, Modified Operators Interpolating at Endpoints, *Mathematics* Volume 9, no. 17, article no. 2051, 2021, Web of Science
- A. M. Acu, G. Bascanbaz-Tunca, I. Rasa, Voronovskaja-Type Quantitative Results for Differences of Positive Linear Operators, *Symmetry*, Volume 13, no. 8, article no. 1392, 2021, Web of Science
- A. M. Acu, G. Bascanbaz-Tunca, I. Rasa, Information potential for some probability density functions, *Applied Mathematics and Computation*, Volume 389, article no. 125578, 2021, Web of Science
- A. M. Acu, I. C. Buscu, I. Rasa, A sequence of Appell polynomials and the associated Jakimovski-Leviatan operators, *Analysis and Mathematical Physics*, Volume 11, no. 2, article no. 88, 2021, Web of Science

- N. Cetin, A. M. Acu, Approximation by alpha-Bernstein-Schurer- Stancu operators, Volume 15, no. 2, 845-860, 2021, Web of Science
- A. M. Acu, M. Heilmann, I. Rasa, Eigenstructure and iterates for uniquely ergodic Kantorovich modifications of operators II, Positivity, Volume 24, no. 4, 2021, Web of Science
- A. M. Acu, I. Rasa, On the composition and decomposition of positive linear operators (VII), Applicable Analysis and discrete Mathematics, Volume 14, no. 1, 213-232, 2021, Web of Science
- A. M. Acu, G. Bascanbaz-Tunca, I. Rasa, Bounds for indices of coincidence and entropies, Mathematical Inequalities & Applications, Volume 24, no. 2, 307-321, 2021
- A. M. Acu, G. Bascanbaz-Tunca, I. Rasa, Differences of Positive Linear Operators on Simplices, Journal of Function Spaces, article no. 5531577, 2021.
- A. M. Acu, A. I. Maduta, I. Rasa, Voronovskaya Type Results and Operators Fixing Two Functions, Mathematical modelling and analysis, Volume 26, no. 3, 2021, Web of Science
- A. M. Acu, H. Gonska, M. Heilmann, Remarks on a Bernstein-type operator of Aldaz, Kounchev and Render, Journal of Numerical Analysis and Approximation Theory, Volume 50, no.1, 3-11, 2021, MathSciNet; Zentralblatt MATH
- A. Al Ahmadi, M. Kummer, M. S. Sorea, A generalization of the space of complete quadrics, Le Matematiche (Catania), Volume 76, no. 2, 431-446, 2021  
<https://lematematiche.dmi.unict.it/index.php/lematematiche/article/view/2251>
- Sh. Najafzadeh, M. Acu, On the Chebyshev polynomial for a certain class of analytic univalent functions, Journal of Function Spaces, Volume 2021, article no. 3716428, Web of Science  
<https://onlinelibrary.wiley.com/doi/10.1155/2021/3716428>
- L. Suciu, E. A. Totoi, Three isometric liftings with invariant isometric part, Banach J. Math. Anal. Volume 15, no. 4, 1-22, 2021, Web of Science <https://doi.org/10.1007/s43037-021-00150-w>
- C. Badea, V. Muller, L. Suciu, High order isometric liftings and dilations, Studia Mathematica, Volume 258, no. 1, 87-101, 2021, Web of Science
- C. Badea, L. Suciu, Hilbert spaces operators with two isometric dilations, Journal of Operator Theory, Volume 86, no. 1, 93–123, 2021, Web of Science
- W. Majdak, L. Suciu, Convex and expansive liftings close to two-isometries and power bounded operators, Linear Algebra and its Applications, Volume 617, 1-26, 2021, Web of Science  
<https://doi.org/10.1016/j.laa.2021.01.009>
- W. Majdak, L. Suciu, Triangulations of Operators with Two-Isometric Liftings, Integral Equations and Oper. Theory, Volume 93, no. 10, 1-24, 2021, Web of Science <https://doi.org/10.1007/s00020-021-02625-9>.

- S. V. Pașca, The modified Bernstein-Stancu operators, *General Mathematics*, Volume 29, no. 1 121-128, 2021, Sciendo, EBSCO, Index Copernicus
- N. A. Secelean, I. M. Olaru, A new approach of some contractive mappings on metric spaces, *Mathematics*, Volume 9, Issue 12, 1-12, 2021, Web of Science
- M. Zhou. M. K. Jain, M. S. Khan, N. A. Secelean, Semi-compatible mappings and common fixed point theorems of an implicit relation via inverse C–class functions, *AIMS Mathematics*, Volume 6, no. 3, 2021, Web of Science
- N. Niralda, S. Mathew, N. A. Secelean, On boundaries of attractors in dynamical systems, *Communications in Nonlinear Science and Numerical Simulation*, Volume 94, article no. 105572, 2021, Web of Science
- A. N. Branga, Fixed Point Results for F-Contractions in Cone Metric Spaces over Topological Modules and Applications to Integral Equations, *Fractal and Fractional*, Volume 6, no. 1, 2021, Web of Science
- ✚ 2022
- A. M. Acu, I. Rasa, A. E. Steopoaie, Algebraic Systems with Positive Coefficients and Positive Solutions, *Mathematics*, Volume 10, no. 8, 2022, Web of Science
- M. Dhamija, N. Deo, R. Pratap, A. M. Acu, Generalized Durrmeyer operators based on inverse Polya–Eggenberger distribution, *Afr. Mat.*, Volume 33, no.1, 2022, Web of Science
- V. Bratian, A. M. Acu, D. M. Mihaiu, R. A. Serban, Geometric Brownian Motion (GBM) of Stock Indexes and Financial Market Uncertainty in the Context of Non-Crisis and Financial Crisis Scenarios, *Mathematics*, Volume 10, no. 3, 2022, Web of Science
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- A. M. Acu, A. Aral, I. Rasa, Generalized Bernstein Kantorovich operators: Voronovskaya type results, convergence in variation, *Carpathian J. Math.*, Volume 38, no. 1, 1 – 12, 2022, Web of Science
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- U. Abel, A. M. Acu, M. Heilmann, I. Rasa, Voronovskaja formula for Aldaz-Kounchev-Render operators: uniform convergence, Volume 14, Issue 1, Article Number 2, 2024
- A. M. Acu, J. A. Adell, I. Rasa, Explicit upper bounds for Touchard polynomials and Bell numbers, Volume 172, Issue 1, 255–263, 2024
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- S.V. Pașca, A. Seserman, A. Ștepoaie, Iterates of positive linear operators and linear systems of equations, Dolomites Research Notes on Approximation, Volume 17, Issue 2, 52-58, 2024

5. Cărți (de autor/editate/traduse) și capitole în cărți:

✚ 2020

- A. Tatoi, Operatori integrali pe spații de funcții complexe, Editura Techno Media, 978-606-616-399-6, 2020

✚ 2023

- A. M. Acu, I. Rasa, Generalized Subharmonic and Weakly Convex Functions. In: Candela, A.M., Cappelletti Montano, M., Mangino, E. (eds) Recent Advances in Mathematical Analysis. Trends in Mathematics, Springer/Birkhäuser, Cham, 2023

6. Lucrări publicate în proceedingurile conferințelor (indexate/neindexate): -

7. Manifestări științifice organizate de către centrul de cercetare:

✚ 2020

- Workshop on New Directions in Approximation Theory and Related Topics, 10.02.2020.

✚ 2021

- Summer School, 29.08.2021 - 7.09.2021
- 16th International Symposium on Geometric Function Theory and Applications (GFTA), 15-18.10.2021.

✚ 2022

- International Conference on Approximation Theory and its Applications (ICATA), 12-14.09.2022
- Sesiunea studentească de comunicări științifice în matematică, ediția XX, 20-21.05.2022.
- Summer School, 10-17.09.2022

✚ 2023

- Sesiunea studentească de comunicări științifice în matematică, ediția XXI, 12-13.05.2023.
- Summer School, 17-26.07.2023

✚ 2024

- Sesiunea studentească de comunicări științifice în matematică, ediția XXII, 17-18.05.2024.

8. Comunicări prezentate la manifestări științifice pe plan internațional/national:

✚ 2020

- S.-M. Sorea, 12/2020 talk on The shapes of level curves of real polynomials near strict local minima, BYMAT (Bringing Young Mathematicians Together), Instituto de Ciencias Matemáticas, Spain.
- S.-M. Sorea, 11/2020 talk on The shapes of level curves of real polynomials near strict local minima, Groupe de Recherche Singularités et Applications, Institut de Mathématiques de Jussieu-Paris Rive Gauche, Paris, France.
- S.-M. Sorea, 11/2020 talk on Disguised Toric Dynamical Systems, Geometric Structures ResearchSeminar, SISSA, Trieste, Italy.
- S.-M. Sorea, 10/2020 talk on The shapes of level curves of real polynomials near strict local minima, Iberoamerican Webinar of Young Researchers in Singularity Theory; the webinar is sponsored by Instituto de Matemática Interdisciplinar (IMI), Universidad Complutense de Madrid, Spain.
- S.-M. Sorea, 09/2020 talk on The shapes of level curves of real polynomials near strict local minima, Geometry and Topology Seminar, NC State University, Raleigh, North Carolina, U.S.A.
- S.-M. Sorea, 08/2020 talk on The shapes of level curves of real polynomials near strict local minima, Lightning Online Talk at the Symmetry, Randomness, and Computations in Real Algebraic Geometry Workshop, ICERM, Brown University, Providence, Rhode Island, U.S.A.
- S.-M. Sorea, 08/2020 talk on The shapes of level curves of real polynomials near strict local minima, Singularity Theory Seminar (online), Universidade Federal do Ceará, Brasil.
- S.-M. Sorea, 06/2020 talk on The shapes of level curves of real polynomials near strict local minima, Algebraic and Combinatorial Perspectives in Mathematical Sciences Seminar, online seminar (Norwegian University of Science and Technology, Université Clermont Auvergne, Technische Universität Berlin, WIAS, Universität Greifswald).
- S.-M. Sorea, 06/2020 talk on Disguised toric dynamical systems, Model Theory of Differential Equations, Algebraic Geometry, and their Applications to Modeling (Online), Banff International Research Station for Mathematical Innovation and Discovery, Banff, Alberta, Canada.
- S.-M. Sorea, 05/2020 talk on The Boy surface, Seminar Course on the Mathematical Collection of Leipzig University, Leipzig, Germany.
- S.-M. Sorea, 04/2020 talk on Exact Solutions in Log-Concave Maximum Likelihood Estimation, Nonlinear Algebra Seminar Online (NASO), Max-Planck-Institut für Mathematik in den Naturwissenschaften (MiS) in Leipzig, Germany.
- S.-M. Sorea, 02/2020 talk on Real Algebraic Geometry of Chemical Reaction Networks, the Milestone Conference of the thematic Einstein semester Algebraic Geometry, which is devoted to the study of algebraic geometry and of its applications, Zuse Institute Berlin, Germany.

- S.-M. Sorea, 01/2020 talk on The shapes of level curves of real polynomials near strict local minima, V Congreso de Jóvenes Investigadores de la RSME (Real Sociedad Matemática Española), Universitat Jaume I de Castelló, Spain.
- S.-M. Sorea, 01/2020 talk on The relative positions of the graphs of univariate polynomials, Nonlinear Algebra Seminar, Max-Planck-Institut für Mathematik in den Naturwissenschaften (MiS) in Leipzig, Germany.
- S.-M. Sorea, 01/2020 talk on Complex Balance and Disguised Toric Dynamical Systems, The 3rd Workshop on Formal Reaction Kinetics and Related Areas, Budapest, Hungary.
- L. Suciú, Visiting Professor for the master course “Ergodic Theory and Applications” May-June, AGH University of Krakow, Poland.
- L. Suciú, Invited to “Workshop on new directions in approximation theory and related topics”, February 10, Lucian Blaga University of Sibiu, with the talk: Cesaro averages and the growth of the resolvent for a bounded operator.
- L. Suciú, Invited to the Seminar on Operator Theory from the Institute of Mathematics of the Romania Academy, July 8 iulie, with the talk: Operatori pe spații Hilbert ce posedă dilatări m-izometrice.

#### 2021

- A. M. Acu, International Conference On Research Frontier In Sciences (Icrfs-21), 5-6th Feb 2021, G H Raison College Of Engineering, Nagpur, India (Keynote Speaker)
- A. M. Acu, 19th International Conference on Functional Equations And Inequalities, Bedlewo, Poland, September 19-21, 2021.
- A. M. Acu, Conference ”Recent Developments In Mathematical Analysis” On The Occasion Of Francesco Altomare’s 70th Birthday, September 23-24, 2021.
- A. Ratiú, Eight European Congress of Mathematics, 20-26 June 2021, Portoroz, Slovenia
- S.-M. Sorea, 12/2021 talk on Poincaré-Reeb trees of real Milnor fibres, SISSA Junior Math Days, Trieste, Italy.
- S.-M. Sorea, 11/2021 talk on Polytopes with rational linear precision in higher dimension, Women in Algebra and Symbolic Computation II, Bad Dürkheim, Germany.
- S.-M. Sorea, 10/2021 talk on Disguised toric dynamical systems, Mathematics of Reaction Networks - Networking Event, online.
- S.-M. Sorea, 08/2021 talk on Disguised toric dynamical systems, SIAM AG21 Mini-symposium on Algebraic-Geometric Methods for Reaction Networks, Conference on Applied Algebraic Geometry, Texas AM University, U.S.A.

- S.-M. Sorea, 07/2021 talk on Disguised toric dynamical systems, Applied Algebra and Analysis Online Seminar (AAA), TU Braunschweig & Universität Osnabrück, Germany.
- S.-M. Sorea, 06/2021 talk on Signatures of paths and the shuffle algebra, GO60 Pure and Applied Algebraic Geometry - Celebrating Giorgio Ottaviani's 60th birthday, CIRM, Italy.
- S.-M. Sorea, 06/2021 talk on Exact solutions in log-concave maximum likelihood estimation, Workshop on Real Algebraic Geometry and Algorithms for Geometric Constraint Systems, The Fields Institute, Toronto, Canada.
- S.-M. Sorea, 06/2021 talk on Measuring the local non-convexity of real algebraic curves, Seminar of the Research Center for Mathematics and Applications, Lucian Blaga University, Sibiu, Romania.
- S.-M. Sorea, 05/2021 talk on The structure of the moduli spaces of toric dynamical systems, SIAM
- S.-M. Sorea, 05/2021 talk on Disguised toric dynamical systems - invited talk for the Workshop for Young Researchers in Mathematics (WYRM), 10th Edition, „Simion Stoilow” Institute of Mathematics of the Romanian Academy (IMAR), in cooperation with the „Octav Mayer” Institute of Mathematics of the Romanian Academy (IMOM), and the Faculty of Mathematics and Computer Science of the Ovidius University of Constanta, Romania.
- S.-M. Sorea, 04/2021 talk on Poincaré-Reeb trees of real Milnor fibres, ALGECOM XXI (Algebra, Geometry, Combinatorics Day), University of Notre Dame, U.S.A.
- S.-M. Sorea, 03/2021 talk on Poincaré-Reeb trees of real Milnor fibres, Geometric Structures Research Seminar, SISSA, Trieste, Italy.
- S.-M. Sorea, 02/2021 talk on Measuring the local non-convexity of real algebraic plane curves, Séminaire Marseillais de Théorie des Singularités, Marseille, France.
- L. Suciu, Invited to the "Seminar of Functional Analysis", January 15, Laboratoire Paul Painleve, Univ Lille 1, France, with the talk: Dilatations isométriques d'ordre supérieur sur les espaces de Hilbert.
- L. Suciu, Invited to “Conference at the occasion of Prof. László Kérchy's 70th birthday” November 15, Bolyai Institute Szeged, Hungary, with the talk: Operators that possess high order isometric dilations.
- L. Suciu, Invited to “Applied Functional Analysis Seminar”, December 8, AGH Univ., Krakow, Poland, with the talk: Expansive dilations for operators on Hilbert spaces.

- A. M. Acu, Fifteenth French-Romanian Colloquium On Applied Mathematics, 28 August – 3 September 2022, Toulouse, France
- A. M. Acu, Functional Analysis, Approximation Theory And Numerical Analysis, Matera, Italy, July 5-8, 2022
- A. M. Acu, Visiting Professor at University of Padua, Italy, 19 February-11 March 2022.
- A.M. Acu, Visiting Professor at University of Wuppertal, 1-29 April 2022.
- A. M. Acu, Visiting Professor at University of Jaen, Spain, 10 – 17 October 2022.
- A. Ratiu, The annual session of methodical-scientific communications in mathematics of S.S.M.R. Sibiu, 12 December 2022, Sibiu
- A. Ratiu, International Conference “Functional Analysis, Approximation Theory and Numerical Analysis”, 5-8 July 2022, Matera, Italy
- S.-M. Sorea, 12/2022 talk on Disguised toric dynamical systems, SISSA Junior Math Days 2022, SISSA Trieste, Italy.
- S.-M. Sorea, 11/2022 talk on Realization of Poincaré-Reeb graphs by real algebraic domains, Seminario Geometría Algebraica: singularidades e invariantes GASIULL, Universidad de La Laguna, Tenerife, Spain.
- S.-M. Sorea, 11/2022 talk on Poincaré-Reeb graphs of real algebraic domains, Bringing Young Mathematicians Together (BYMAT) 2022, Universidad de Valencia, Spain.
- S.-M. Sorea, 11/2022 talk on Poincaré-Reeb graphs of real algebraic domains, Seminario Geometría Algebraica: singularidades e invariantes GASIULL, Universidad de La Laguna, Tenerife, Spain.
- S.-M. Sorea, 10/2022 talk on Poincaré-Reeb graphs of real algebraic domains, Real Algebraic Geometry - Géométrie algébrique réelle, CIRM Marseille, France; VIDEO RECORDING.
- S.-M. Sorea, 10/2022 talk on Poincaré-Reeb graphs of real algebraic domains, Singularity theory and its applications, Research Institute for Mathematical Sciences, Kyoto University, Japan.
- S.-M. Sorea, 09/2022 talk on Poincaré-Reeb graphs of real algebraic domains, ICATA2022 (International Conference on Approximation Theory and its Applications), Lucian Blaga University Sibiu, Romania.
- S.-M. Sorea, 09/2022 talk on Disguised toric dynamical systems, XVème Colloque Franco-Roumain de Mathématiques Appliquées, Université Toulouse, France.
- S.-M. Sorea, 07/2022 talk on Poincaré-Reeb graphs of real algebraic domains, International Workshop on Real and Complex Singularities, Universidade de São Paulo, Campus São Carlos, Brazil.

- S.-M. Sorea, 07/2022 talk on Poincaré-Reeb graphs of real algebraic domains, Meeting of the GDR Singularités 2022, Centre Paul Langevin, Aussois, France.
  - S.-M. Sorea, 05/2022 talk on Multinomial staged tree models and polytopes with rational linear precision, Workshop for Young Researchers in Mathematics (WYRM), IMAR, Bucharest, Romania.
  - S.-M. Sorea, 04/2022 talk on Disguised Toric Dynamical Systems, Formal Reaction Kinetics, Budapest University of Technology and Economics, Budapest, Hungary.
  - S.-M. Sorea, 02/2022 talk on The shapes of level curves of real polynomials near strict local minima, 2nd International Meeting of Young Researchers in Singularity Theory and Related Fields, Sao Carlos, Brazil.
  - L. Suci, Invited to „Scientific Seminar of the Department of Math and Inf“ Transilvania Univ of Brasov, June 23, with the talk: Studiu asupra operatorilor mărginiți pe spații Hilbert care sunt compresii de multiplicări m-izometrice.
  - L. Suci, Invited to 27th International Conference on Difference Equations and Applications, Paris, July 21, with the talk: On the relation between growth conditions on some operator means and the behavior of the resolvent for bounded operators on Banach spaces.
  - L. Suci, Invited to the Seminar of Functional Analysis, Institute of Math. Of the Czech Academy of Sciences, September 20, with the talk: On Brownian unitary extensions and m-isometric liftings.
  - S.-V. Pașca, Voronovskaya type results for special sequences of operators, The International Conference on Approximation Theory and its Applications, September 12-13, 2022, Sibiu, Romania.
- 🚩 2023
- A. M. Acu, Approximation Theory, Methods And Applications (ATMA2023), Padova (Italy) January 18-20, 2023 (Invited Speaker).
  - A. M. Acu, 20th International Conference On Functional Equations And Inequalities, Bedlewo, Poland, September 17-23, 2023.
  - A. Ratiu, National Conference „Didactica matematicii”, Satu Mare, 2023
  - S.-M. Sorea, 10/2023 talk on Combinatorial study of morsifications of real univariate singularities, Research School on Real Algebraic Geometry, SISSA (Scuola Internazionale Superiore di Studi Avanzati) & IGAP (Institute for Geometry and Physics), Trieste, Italia.
  - S.-M. Sorea, 09/2023: participare la Fall Semester on "Algebraic Statistics and Our Changing World - New Methods for New Challenges", the Institute for Mathematical and Statistical Innovation, University of Chicago, U.S.A.

- S.-M. Sorea, 09/2023 talk on A quadratic identity in the shuffle algebra and an alternative proof for de Bruijn's formula, Trends in Representation Theory and Related Topics, Babes-Bolyai University of Cluj-Napoca, Romania.
- S.-M. Sorea, 07/2023 poster The Structure of the Moduli Spaces of Toric Dynamical Systems, SIAM AG23, TU Eindhoven, Olanda.
- S.-M. Sorea, 07/2023 talk on (Disguised) toric dynamical systems and their (disguised) toric locus, SIAM AG23, TU Eindhoven, Olanda.
- S.-M. Sorea, 07/2023 talk on (Disguised) toric dynamical systems and their (disguised) toric locus, The Tenth Congress of Romanian Mathematicians 2023, University of Pitești, Romania.
- S.-M. Sorea, 06/2023 talk on (Disguised) toric dynamical systems and their (disguised) toric locus, The National School on Algebra - Interactions between Algebra and Geometry in Bucharest 2023, University of Bucharest & IMAR, Romania.
- S.-M. Sorea, 05/2023 talk on Poincaré-Reeb graphs of real algebraic domains, Algebraic and Geometric Methods of Analysis, Institute of Mathematics of National Academy of Sciences of Ukraine.
- S.-M. Sorea, 04/2023 talk on Exact Solutions in Log-Concave Maximum Likelihood Estimation, Applied CATS (Combinatorics, Algebra, Topology & Statistics) Seminar, Mathematics of Data and AI, KTH Stockholm, Sweden.
- S.-M. Sorea, 03/2023 talk on Disguised toric dynamical systems, Seminar on the Mathematics of Reaction Networks, Harvard University / Politecnico di Torino / Texas A & M University / University of Vienna.
- S.-M. Sorea, 02/2023 talk on Disguised toric dynamical systems, Segundo Congreso Internacional de Álgebra y Sistemas Dinámicos, Universidad Nacional Mayor De San Marcos, Peru.
- S.-M. Sorea, 01/2023 talk on Poincaré-Reeb graphs of real algebraic domains, the Copenhagen-Jerusalem Combinatorics Seminar, University of Copenhagen, Denmark.
- M. Acu, 6th International Symposium On Geometric Function Theory And Applications (Gfta 2021).
- L. Suciú, Invited to the conference Smart Diaspora 2023, Timișoara, April 10-13, with the talk: Extensions for operators on Hilbert spaces which satisfy polynomial growth conditions.
- L. Suciú, Invited to the conference Operator Theory Days, Conference in honor of Mostafa Mbekhta, May 24th and 25th in Lille, with the talk: On some special extensions for certain operators on Hilbert spaces.

- L. Suciu, Invited to 28th International Conference on Difference Equations and Applications, Phitsanulok, Thailand, July 17-21, with the talk: Brownian type extension for operators on Hilbert spaces.
- L. Suciu, Invited to the conference Operator Theory in Lille - a conference in honor of Dan Timotin, November 6-8, with the talk: Wold decompositions and Brownian type operators.
- S.-V. Pașca, The eigenstructure of Beta Operators with Jacobi Weights, Session of Mathematical Communications, December 9, 2023, Constanța, Romania.

 2024

- A. M. Acu, Train The Trainers How To Teach ICT Tools Of Learning, La Laguna University, Spain, March 10-18, 2024.
- A. M. Acu, 60th International Symposium On Functional Equations Koscielisko, Poland, June 9–15, 2024.
- A. Ratiu, Workshop in Pythagoras Project “Innovative strategies for teaching and learning mathematics”, 11-15 March 2024, Universidad de La Laguna, Spain
- A. Ratiu, Transnational Project Meeting in Pythagoras Project, 27-28 May 2024, Hellenic Mediterranean University, Greece
- S.-M. Sorea, 05/2024 talk on Combinatorial study of morsifications of real univariate singularities, Workshop for Young Researchers in Mathematics, Institutul de Matematică al Academiei Române and Universitatea Alexandru Ioan Cuza, Iași, România.
- S.-M. Sorea, 04/2024 talk on Combinatorial study of morsifications of real univariate singularities, Augsburg Mathematisches Kolloquium (Sommersemester), Universität Augsburg, Institut für Mathematik, Augsburg, Germania.
- L. Suciu, Invited to 29th International Conference on Difference Equations and Applications, Paris, June 27, with the talk: Wold-type decompositions for m-isometries on Hilbert spaces.

9. Brevete și alte produse cu drepturi de proprietate intelectuală: -

10. Parteneriate și alte activități desfășurate în colaborare cu agenți din mediul socio-economic:

Încheierea unui acord cadru de colaborare cu:

- Bosch Automotive SRL, 1.11.2020
- MindSoft SRL, 2.05.2022
- Microsoft IT Solution SRL, 2.05.2022
- Industrial Software SRL, 2022
- BearingPoint SRL, 21.11.2023

- Visma, 2023
- Regnology Romania SRL, 2023
- Ropardo SRL, 2023
- Spectroo Software, 2023
- NXP Semiconductors Romania SRL, 7.03.2023
- Prelungirea contractului Continental, 28.02.2022

11. Sisteme, modele, studii și rapoarte de grup și individuale, soluții de probleme însoțite de documentații corespunzătoare: -

12. Lucrări („opere”) și manifestări cu caracter cultural-artistic (doar pentru centrele de tipul *Creație artistică și promovarea culturii*): -

13. Alte realizări notabile (de ex., colaborări cu instituții/rețele academice de prestigiu pe plan internațional, afilieri internaționale ș.a.):

- Încheierea unui acord cadru de colaborare cu Institutul Național de Cercetare –Dezvoltare pentru Tehnologii Criogenice și Izotopice (I.C.S.I), Rm. Valcea, 2024.
- Încheierea unui acord cadru de colaborare cu Direcția Națională de Cyber Security, 2024.
- Colaborări cu Karlstads Universitet, Suedia, 2016.
- Colaborări cu Aalborg Universitet, Danemarca, 2022.
- Colaborări cu Universidad de la Laguna, Spania, 2022.
- Colaborări cu Hellenic Mediterranean University, Grecia, 2022.
- Colaborări cu Slovenska Technicka Univerzita V Bratislave, Slovacia, 2023.
- Colaborări cu Instituto Politecnico do Porto, Portugalia, 2022.

## VI. Concluzii

Nr. crt.	Obiective	Rezultate propuse	Rezultate realizate	Gradul de realizare a obiectivului	Ponderea obiectivului în activitatea centrului
1.	O1: Publicarea rezultatelor cercetării	R1: publicare articole (20 articole)	R1: publicare articole (130 articole)	100%	60 %
2.	O2: Proiecte de cercetare	R1: participarea la competiții și	R1: participarea la competiții și câștigarea proiectelor de cercetare (depunere 27	100%	20 %

		caștigarea proiectelor de cercetare (depunere 4 proiecte)	proiecte)		
3.	O3: Noi colaborări cu instituții/rețele academice de prestigiu pe plan internațional	R1: încheierea de noi colaborări/ parteneriate (4 parteneriate) R2: Participare la conferinte sau workshopuri (10 conferinte) R3: Organizarea de evenimente științifice (4 evenimente)	R1: încheierea de noi colaborări/ parteneriate (18 parteneriate) R2: Participare la conferinte sau workshopuri (90 conferinte) R3: Organizarea de evenimente științifice (9 evenimente) 2020: 1 2021: 2 2022: 3 2023: 2 2024: 1	100%	20 %
TOTAL	<b>Gradul de realizare a obiectivelor centrului în perioada 2020-2024</b>			100%*	

\* Se calculează după formula: (Gradul de realizare a O1 x Pondere a O1 în activitatea centrului) + (Gradul de realizare a O2 x Pondere a O2 în activitatea centrului) + (Gradul de realizare a On x Pondere a On în activitatea centrului) = 100%

**Notă:** structura raportului de mai sus are un caracter minimal și ea se poate cu alte categorii de observații.

Data,

26.07.2024

Director Centru,

Conf. univ. dr. Sofonea Daniel Florin

