



Institutul de Statistică Matematică și Matematică Aplicată
„Gheorghe Mihoc – Caius Iacob” al Academiei Române
Calea 13 Septembrie, nr. 13, sector 5, 050711 București
Tel. 021 318 2433 Fax 021 318 2439
E-mail: office@ismma.ro

Institutul de Statistică Matematică și Matematică Aplicată
„Gheorghe Mihoc-Caius Iacob”
al Academiei Române

Raport de activitate pe anul 2022



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E-mail: office@ismma.ro

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1	Colectivul: Ecuații cu derivate parțiale și aplicații în științe Programul de cercetare: Ecuații cu derivate parțiale și aplicații în științe	<ol style="list-style-type: none">1. CS I Cristian-Mihai CAZACU2. CS I Cecil GRUNFELD3. CS I Liviu MARIN4. CS I Gabriela MARINOSCHI5. CS I Sorin-Daniel MICU6. CS I Mihai MIHĂILESCU7. CS I Dumitru POPESCU8. CS I Gabriel Eduard VÎLCU9. CS II Stelian ION10. CS II Tudor IONESCU11. CS II Oana-Valeria LUPAȘCU-STAMATE12. CS II Dorin MARINESCU13. CS III Ștefan-Gicu CRUCEANU14. CS III Maria FĂRCĂȘEANU15. CS III Andrea GRECU16. CS Marian PETRICĂ17. AC Mihai BUCĂTARU18. AC Vlad Raul CONSTANTINESCU
2	Colectivul: Inferență Statistică, Control Statistic și Optimizare Programul de cercetare: Modele de inferență statistică și optimizare	<ol style="list-style-type: none">1. CS I Mihai POSTOLACHE2. CS I Cristian PREDA3. CS I Vasile PREDA4. CS I Marius RĂDULESCU5. CS I Ioan STANCU6. CS II Miruna BELDIMAN7. CS II Aida TOMA8. CS III Alexandru AGAPIE9. CS III Andreea STANCU-RUSU10. CS III Silviu-Laurențiu VASILE11. CS Bogdan ALEXE12. CS Luiza BADIN13. CS Florentina ȘUTER
3	Colectivul: Probabilități și Procese Stocastice Programul de cercetare: Dependență stocastică și teoreme limită	<ol style="list-style-type: none">1. CS I Ion NECOARĂ2. CS I Gheorghică ZBĂGANU3. CS III Udrea PĂUN4. CS III Anișoara Maria RĂDUCAN5. CS III Gabriela SEBE6. CS III Mariana SIBICEANU7. CS Valentin IONESCU



1. Colectivul Ecuatii cu derivate parțiale și aplicații în științe

1.1 Articole publicate Reviste ISI strainatate

Nr. Crt.	Autori	Titlul	Journal	FI/SRI
1.	M. Bucataru, I. Cîmpean, L. Marin	A gradient-based regularization algorithm for the Cauchy problem in steady-state anisotropic heat conduction	Computers & Mathematics with Applications 119 220-240, 2022	FI=3,218
2.	Cazacu Cristian, Ignat Liviu, Pazoto Ademir, Rossi Julio	A convection-diffusion model on a star-shaped graph.	NoDEA Nonlinear Differential Equations Applications 29 (2022), no. 2, Paper No. 17, 37 pp.	FI=1,061
3.	Cazacu Cristian, Flynn Joshua, Lam Nguyen	Sharp second order uncertainty principles	Journal of Functional Analysis 283 (2022), no. 10, Paper No. 109659, 37 pp	FI=1,891
4.	T. C. Ionescu, O.V. Iftime and I. Necoara	Model reduction with pole-zero placement and high order moment matching.	Automatica, 138, doi: 10.1016/j.automatica.2021.1110140 2022 (Q1 ais - Automation & Control Systems)	FI=6,15
5.	I. Necoara, T. C. Ionescu	OPTIMAL H ₂ MOMENT MATCHING-BASED MODEL REDUCTION FOR LINEAR SYSTEMS BY (NON)CONVEX OPTIMIZATION	MDPI Mathematics 2022, 10(10), 1765; https://doi.org/10.3390/math10101765	FI=2,592
6.	K. Van Bockstal, L. Marin	Finite element method for the reconstruction of a time-dependent heat source in isotropic thermoelasticity systems of type-III	ZAMP – Zeitschrift für angewandte Mathematik und Physik 73(3) art. no. 113, 2022	FI=2,221
7.	G. Marinoschi	Identification of transmission rates and reproduction number in a SARS-CoV-2 epidemic model	Discrete and Continuous Dynamical Systems – Series S, Vol.15, No. 12, December 2022, pp. 3735-3744 Doi: 10.3934/dcdss.2022128	FI=1.86



Nr. Crt.	Autori	Titlul	Journal	FI/SRI
8.	Micu S. , Niță C.	On a Fractional Diffusion Equation with Moving Control	SIAM Journal on Control and Optimization, Vol. 60, Iss. 2 (2022), pp. 871-889 DOI: 10.1137/20M1385056	FI=2.163
9.	Leugering G., Micu S. , Roventa I., Wang Y.	Controllability properties of a hyperbolic system with dynamic boundary conditions	Journal of Evolution Equations, 22, Art. 65(2022) DOI: 10.1007/s00028-022-00823-5	FI=1,261
10.	M. Fărcășeanu M. Mihăilescu	On the Monotonicity of the Best Constant of Morrey's Inequality in Convex Domains	Proceedings of the American Mathematical Society 150 (2022), 651-660.	FI=0.971
11.	M. Mihăilescu	Monotonicity Properties for the Variational Dirichlet Eigenvalues of the p-Laplace Operator	Journal of Differential Equations 335 (2022), 103-119.	FI=2.615
12.	C. Enache, M. Mihăilescu , D. Stancu-Dumitru	The Monotonicity of the p-Torsional Rigidity in Convex Domains	Mathematische Zeitschrift 302 (2022), 419-431.	FI=0.82
13.	M. Bocea, M. Mihăilescu , D. Stancu-Dumitru	The Monotonicity of the Principal Frequency of the Anisotropic p-Laplacian	Comptes Rendus Mathematique 360 (2022), 993-1000.	FI=0.787
14.	A. Grecu M. Mihăilescu	4-Harmonic Functions and Beyond	Le Matematiche 77 (2022), 107-118.	N/A
15.	Marian Petrica , Radu D. Stochitoiu, Marius Leordeanu Ionel Popescu	A regime switch analysis on Covid-19 in Romania	Scientific Reports 12, Article number: 15378 (2022) https://doi.org/10.1038/s41598-022-18837-x	FI=4.996
16.	Lucian G. Scurtu, Marian Petrica , Mariana Grigore, Alina Avram, Ionel Popescu & Olga Simionescu	A Conservative Combined Laser Cryoimmunotherapy Treatment vs. Surgical Excision for Basal Cell Carcinoma	Journal of clinical medicine 2022, 11(12), 3439; https://doi.org/10.3390/jcm11123439	FI=4.964



Nr. Crt.	Autori	Titlul	Journal	FI/SRI
17.	Dumitru Petru I. Iga, Dumitru Popescu , Valentin I. R. Niculescu	On the Impact of Meso Compounds and Their Isomers. Towards a New Type of Oscillation?	Chemistry Research Journal, 7(1):39-48, 2022 www.chemrj.org	N/A
18.	Dumitru Petru I. Iga, Dumitru Popescu , Valentin I. R. Niculescu	Bermuda Triangle In Chemistry	Asian Journal of Chemical Sciences 12(2): 14-30, 2022	N/A
19.	S.K. Chaubey, G.-E. Vilcu	Gradient Ricci solitons and Fischer-Marsden equation on cosymplectic manifolds	Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemática 116 (2022), Article number: 186	FI=2.276
20.	B.-Y. Chen, A.D. Vilcu, G.-E. Vilcu	Classification of graph surfaces induced by weighted- homogeneous functions exhibiting vanishing Gaussian curvature	Mediterranean Journal of Mathematics 19 (2022), Article number: 162	FI=1.305
21.	S. Deshmukh, N.B. Turki, G.-E. Vilcu	Characterizing small spheres in a unit sphere by Fischer- Marsden equation	Journal of Inequalities and Applications, 2022 (2022), Article number: 118	FI=2.021
22.	S. Decu, G.-E. Vilcu	Casorati inequalities for statistical submanifolds in Kenmotsu statistical manifolds of constant ϕ -sectional curvature with semi-symmetric metric connection	Entropy 24(6) (2022), 800	FI=2.738
23.	M.A. Akyol, R. Demir, N.O. Poyraz, G.-E. Vilcu	Optimal inequalities for hemi- slant Riemannian submersions	Mathematics 2022, 10(21), 3993	FI=2.592



Reviste ISI Romania

Nr. Crt.	Autori	Titlul	Journal	FI/SRI
1.	Cecil P. Grunfeld	ON A NONLINEAR EVOLUTION MODEL IN AN ORDERED BANACH SPACE WITH NORM ADDITIVE ON THE POSITIVE CONE	PROCEEDINGS OF THE ROMANIAN ACADEMY, Series A, Volume 22, Number 4/2021, pp. 307–315	FI=0.734 (an 2021).
2.	Dumitru Popescu, Dumitru Petru I. Iga, Alin Gabriel Popescu, Valentin I. R. Niculescu	Pulsatory Liposome – A Two-Stroke Bionic Biomicroengine	Romanian Journal of Physics, 2022 (in press)	FI=1.662

Alte reviste în străinătate

Nr. Crt.	Autori	Titlul	Journal
1.	A. Favini, G. Marinoschi, H. Tanabe, Ya. Yakubov,	Identification for general degenerate problems of hyperbolic type in Hilbert spaces,	Journal of Mathematical Sciences, 260, 4, 583-599, 2022.

Alte reviste în țară

Nr. Crt.	Autori	Titlul	Journal
1.	Dumitru Popescu, Dumitru Petru Iga, Alin Gabriel Popescu, Valentin I. R. Niculescu	Mathematical Description of the Functioning of the Pulsatory Liposome	Proceedings of the International Conference of Aerospace Sciences "AEROSPATIAL 2022", ISSN 2067-8614, ISSN-L = 2067-8614, INCAS



1.2. Capitole în volume colective

Edituri străinătate

Nr. Crt.	Autori	Titlul Capitolului	Titlul volumului	Editura
1.	G. Marinoschi	Feedback stabilization of Cahn–Hilliard phase-field systems	Optimization and Control for Partial Differential Equations. Uncertainty quantification, open and closed-loop control, and shape optimization (Eds. R. Herzog, M. Heinkenschloss, D. Kalise, G. Stadler, and E. Trélat), Radon Series on Computational and Applied Mathematics, vol. 29, 367-392, 2022	De Gruyter
2.	Dumitru Popescu, Alin Gabriel Popescu	Pulsatory Liposome: A Possible Biotech-nological Device	Liposomes - Recent Advances, New Perspectives and Applications	Intech Open, London, United Kingdom. Member of the United Nations Sustainable Development Goals Publishers Compact
3.	J.W. Lee, C.W. Lee, B. Şahin, G.-E. Vîlcu	Chen-Ricci inequalities for Riemannian maps and their applications	Differential Geometry and Global Analysis: In Honor of Tadashi Nagano, Editors: Bang-Yen Chen, Nicholas D. Brubaker, Takashi Sakai, Bogdan D. Suceavă, Makiko Sumi Tanaka, Hiroshi Tamaru, Mihaela B. Vajiac, AMS, Series Contemporary Mathematics, vol. 777, 2022, 137-152.	American Mathematical Society

1.3. Proceedings

Micu Sorin Daniel - Editor al volumului: CONTROL AND ANALYSIS OF PARTIAL DIFFERENTIAL EQUATIONS, Special Issue dedicated to Marius Tucsnak on the occasion of his 60th birthday, împreună cu Nicolae CÎNDEA, Günter LEUGERING, Jérôme LOHÉAC, Kirsten MORRIS, Takéo TAKAHASHI, and Enrique ZUAZUA, ROMANIAN ACADEMY MATHEMATICAL REPORTS, VOL. 24(74), No. 1-2 (2022).



**1.4. Conferințe
 Internaționale**

Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
1.	M. Bucataru, I. Cîmpean, L. Marin	Stable numerical reconstruction of non-smooth boundary data in steady-state anisotropic heat conduction	8th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2022) / Norvegia	5 – 9 iunie 2022
2.	Cazacu Cristian	Sharp weighted first and second order Caffarelli-Kohn-Nirenberg type inequalities in the L^2 setting,	XVème Colloque Franco-Roumain de Mathématiques Appliquées, Toulouse, Université Paul Sabatier Franța Link: https://15colfro.sciencesconf.org/	29 August - 2 Septembrie 2022
3.	Cazacu Cristian	Sharp Caffarelli-Kohn-Nirenberg type inequalities	" Seminar on Nonlinear Operators and Differential Equations", Universitatea Babeș-Bolyai, Cluj-Napoca, România Link: http://www.math.ubbcluj.ro/~nodeacj/soned.html	14 Aprilie 2022
4.	Cazacu Cristian	Hardy inequalities for magnetic p-Laplacians	International Conference on Applied Mathematics and Numerical Methods (ICAMNM), Craiova, România Link: https://cis01.central.ucv.ro/ICAMNM/?Home	29 Iulie-2 Iulie 2022
5.	Cazacu Cristian	Sharp first and second order Caffarelli-Kohn-Nirenberg type inequalities	Current Trends in Applied Mathematics, Institutul de Matematică Octav Mayer al Academiei Române, Iași, România Link: http://octavmayer.acadiasi.ro/site_CTAM/main.html	20 Noiembrie 2021 (nedeclarat în raportul pe anul 2021)
6.	Cazacu Cristian	The Hardy inequality and large time behaviour of the heat equation on $\mathbb{R}^{N-k} \times (0, \infty)^k$	Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, Republica Cehă Link: http://mafia.fjfi.cvut.cz/index.php?str=seminar	22 Noiembrie 2022



Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
7.	Stelian Ion, Dorin Marinescu, Ștefan-Gicu Cruceanu	Mathematical Modeling of some Hydrological Processes	International Conference on Applied Mathematics and Numerical Methods (ICAMNM - 4 th edition), Craiova - online, ROMÂNIA	29 Jun – 2 Jul. 2022
8.	Stelian Ion, Dorin Marinescu, Ștefan-Gicu Cruceanu	Dam Break Flow with Erosion and Vegetation	The 29 th Conference on Applied and Industrial Mathematics (CAIM 2022) / Chișinău, Rep. MOLDOVA	25-28. Aug. 2022
9.	Stelian Ion, Dorin Marinescu, Ștefan-Gicu Cruceanu	How to build up an Artificial Neural Network with C.	The 29 th Conference on Applied and Industrial Mathematics (CAIM 2022) / Chișinău, Rep. MOLDOVA	25-28. Aug. 2022
10.	M. Farcaseanu, F. Cirstea	Isolated singularities for nonlinear elliptic equations with Hardy potential (poster)	Hausdorff School on Geometric Analysis and Nonlinear Partial Differential Equations /Germania	8-12 August 2022
11.	M. Farcaseanu, F. Cirstea	Classification of singular solutions to nonlinear elliptic equations with a gradient term	15 th French-Romanian Colloquium on Applied Mathematics /Franta	29 August – 3 Septembrie 2022
12.	M. Farcaseanu, F. Cirstea	Classification of singular solutions to nonlinear elliptic equations with a gradient term	International Conference on Applied Mathematics and Numerical Methods	29 Iunie - 2 Iulie 2022
13.	A.F. Bertolin, A. Grecu, L.I. Ignat	Hardy uncertainty principle for the linear Schrodinger equation on regular quantum trees	Workshop for Young Researchers in Mathematics/Romania	19-20 Mai, 2022
14.	A.F. Bertolin, A. Grecu, L.I. Ignat; I. Cîmpean, A. Grecu; A. Grecu, L.I. Ignat	The Schrödinger equation on quantum graphs: dispersive properties, uncertainty principle and NLS with random dispersion(poster)	XVème Colloque Franco-Roumain de Mathématiques Appliquées/Franta	29.08-02.09.2022
15.	Cecil P. Grunfeld	On a positive semigroup associated to a nonlinear evolution model in an ordered space	The 29th Conference on Applied and Industrial Mathematics, CAIM 2022/ Republica Moldova	25-27.08.2022



Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
16.	Stelian ION, Dorin Marinescu, Stefan Cruceanu	Large and noisy data interpolation	Numerical Analysis, Numerical Modeling, Approximation Theory (NA-NM-AT 2022), Cluj Napoca, Romania	October 26-28, 2022
17.	Oana Lupascu-Stamate	h-transform for Bochner subordinate L^p -semigroups	Workshop for Young Researchers in Mathematics-11th Edition, Bucuresti	20 mai 2022
18.	Oana Lupascu-Stamate	h-transform of Doob and nonlocal branching processes	Journée Pasta, Nancy, Franta	8 iulie 2022
19.	Oana Lupascu-Stamate	Asymptotic behaviour of one-dimensional avalanche model through a particular stochastic process	XVeme Colloque Franco-Roumain de Mathematiques Appliquees, Toulouse	1 septembrie 2022
20.	M. Bucataru, I. Cîmpean, L. Marin	Stable numerical reconstruction of non-smooth boundary data in steady-state anisotropic heat conduction	International Conference on Inverse Problems in Engineering (ICIPE 2022) / Italia	15-19 mai 2022
21.	M. Bucataru, I. Cîmpean, L. Marin	Stable numerical reconstruction of solutions to the Cauchy problem in anisotropic heat conduction with non-smooth coefficients	Numerical Analysis, Numerical Modeling, Approximation Theory (NANMAT 2022) / România	26-28 octombrie 2022
22.	G. Marinoschi	Minimal time control for parabolic-type equations, Plenary speaker	XVème Colloque Franco-Roumain de Mathématiques Appliquées Toulouse, Franta	29.08-2.09.2022
23.	Sorin Micu	Controllability properties of a fractional diffusion equation	IX Partial differential equations, optimal design and numeric, Benasque, Spain	31 august 2022
24.	M. Mihăilescu	Monotonicity properties for the variational Dirichlet eigenvalues of the Δ -Laplace operator	International conference on applied mathematics and numerical methods (fourth edition), University of Craiova, Craiova, Romania http://cis01.central.ucv.ro/ICAMNM/	June 29 - July 2, 2022



Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
25.	G.-E. Vîlcu	Killing forms on Sasaki-Einstein spaces	Workshop on Differential Geometry, Sungkyunkwan University, South Korea, 8-9 August 2022	8 August 2022 (online talk)

Conferințe Naționale

Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
1.	M. Bucataru	Stable numerical reconstruction of non-smooth boundary data in steady-state anisotropic heat conduction	Sesiunea de comunicări științifice pentru studenți / România	27 mai 2022
2.	Constantinescu Vlad Raul	WORKSHOP „Doctoral Research Days”	Romania, Bucuresti	11-12 Octombrie 2022
3.	Constantinescu Vlad Raul	Statistical Modeling with Applications 2022	Romania, Bucuresti	14-15 Octombrie 2022
4.	Sorin Micu	Control and its approximation	Numerical Analysis, Numerical Modeling, Approximation Theory (NA-NM-AT 2022), Cluj, Romania (online)	28 octombrie 2022



2. Colectivul: Inferență Statistică, Control Statistic și Optimizare

2.1. Articole publicate

Reviste ISI strainatate

Nr. Crt.	Autori	Titlul	Journal	FI/SRI
1.	Agapie, Alexandru, O. Solomon, M. Giuclea	THEORY OF (1+1) ES ON THE RIDGE	IEEE Transactions on Evolutionary Computation, ISSN 1089-778X, Volume: 26, Issue: 3, June 2022 Pages: 501 - 511	FI=16,497
2.	A. Agapie, O. Solomon, L. Bădin	Theory of (1+1) ES on SPHERE revisited	IEEE Transactions on Evolutionary Computation, 2022, publicat online, doi: 10.1109/TEVC.2022.3217524.	FI=16,497
3.	Agapie, Alexandru,	SPHERICAL DISTRIBUTIONS USED IN EVOLUTIONARY ALGORITHMS	Mathematics 9(23), 3098, eISSN 2227-7390, 2021 (nu a fost raportat anul trecut, fiind publicat după predarea raportului anual)	FI=2,14
4.	S. Kumari, K. Gdawiec, A. Nandal, M. Postolache, R. Chugh:	A novel approach to generate Mandelbrot sets, Julia sets and biomorphs via viscosity approximation method.	Chaos, Solitons & Fractals 163(2022), Art. No. 112540	FI=9.922
5.	Y. Yao, H. Li M. Postolache	Iterative algorithms for split equilibrium problems of monotone operators and fixed point problems of pseudo-contractions.	Optimization 71(2022), No. 9, 2451-246	FI=2.456
6.	G.I. Usurelu M. Postolache	Algorithm for generalized hybrid operators with numerical analysis and applications.	J. Nonlinear Var. Anal. 6(2022), No. 3, 255-277	FI=2.175
7.	A. Bejenaru M. Postolache	New approach to split variational inclusion issues through a three-step iterative process.	Mathematics 10(2022), No. 19, Art. No. 3617	FI=2.592



Nr. Crt.	Autori	Titlul	Journal	FI/SRI
8.	G.I. Usurelu, T. Turcanu M. Postolache	Algorithm for two generalized nonexpansive mappings in uniformly convex spaces.	Mathematics 10(2022), No. 3, Art. No. 318	FI=2.592
9.	A. Latif, M. Postolache M.O. Alansari	Backward-forward type algorithm for a class of variational inequalities and fixed point problem.	J. Nonlinear Convex Anal. 23(2022), No. 5, 1035-1048	FI=1.016
10.	J. Balooee, M. Postolache Y. Yao:	System of generalized nonlinear variational-like inequalities and nearly asymptotically nonexpansive mappings: graph convergence and fixed point problems.	Ann. Funct. Anal. 13(2022), No. 4, Art. No. 68.	FI=0.993
11.	Sfetcu, R.C., Sfetcu, S.C., Preda, V.	On Tsallis and Kaniadakis Divergences	Mathematical Physics, Analysis and Geometry, 25, 1, 1-23, 2022	FI=1.027
12.	Hirica, I.E., Pripoae, C.L., Pripoae, G.T., Preda, V.	Lie Symmetries of the Nonlinear Fokker-Planck Equation Based on Weighted Kaniadakis Entropy	Mathematics, 10, 15, 2776, 2022	FI=2.592
13.	Hirica, I.E., Pripoae, C.L., Pripoae, G.T., Preda, V.	Weighted Relative Group Entropies and Associated Fisher Metrics	Entropy, 24, 1, 120, 2022	FI=2.738
14.	Hirica, I.E., Pripoae, C.L., Pripoae, G.T., Preda, V.	Conformal Control Tools for Statistical Manifolds and for γ -Manifolds	Mathematics, 10, 7, 1061, 2022	FI=2.592
15.	Sheraz, M., Dedu, S., Preda, V.	Volatility Dynamics of Non-Linear Volatile Time Series and Analysis of Information Flow: Evidence from Cryptocurrency Data	Entropy, 24, 10, 1410, 2022	FI=2.738
16.	Iatan, I., Drăgan, M., Dedu, S., Preda, V.	Using Probabilistic Models for Data Compression	Mathematics, 10, 20, 3847, 2022	FI=2.592



Nr. Crt.	Autori	Titlul	Journal	FI/SRI
17.	Sfetcu, R.C., Sfetcu, S.C., Preda, V.	Some Properties of Weighted Tsallis and Kaniadakis Divergences	Entropy, 2022	FI=2.738
18.	Preda, V., Dedu, S., Iatan, I., Dănilă Cernat, I., Sheraz, M.	Tsallis entropy for loss models and survival models involving truncated and censored random variables,	Entropy, 24, 11, 1654, 2022	FI=2.738
19.	Pripoae, C.L., Hirica, I.E., Pripoae, G.T., Preda, V.	Fisher-like metrics <u>Associated with ϕ-Deformed (Naudts) Entropies</u>	Mathematics, 10, 22, 4311, 2022	FI=2.592
20.	Raducan, A.M.; Radulescu, C.Z.; Radulescu, M.; Zbaganu, G	On the Probability of Finding Extremes in a Random Set	Mathematics 2022 10, 1623.	FI=2.592
21.	Radulescu, C.Z.; Radulescu, M.; Boncea, R	A Multi-Criteria Decision Support and Application to the Evaluation of the Fourth Wave of COVID-19 Pandemic	Entropy 2022, 24, 642.	FI=2,738
22.	Radulescu, C.Z., Radulescu, M., Zbaganu Gh., Boncea, R.	A Group Multi-Criteria approach for development of a country COVID-19 indicator	Procedia Computer Science 199 (2022) 149–156	Jurnal Elsevier
23.	B.B. Upadhyay; I.M. Stancu-Minasian; Priyanka Mishra	On relations between nonsmooth interval-valued multiobjective programming problems and generalized Stampacchia vector variational inequalities	Optimization, 2022, <u>https://doi.org/10.1080/02331934.2022.2069569</u>	FI = 2,456
24.	Suter, F., Cernat, I., Drăgan, M.	Some Information Measures Properties of the GOS-Concomitants from the FGM Family	Entropy 24 (10), 1361.	FI=2.738



Reviste ISI Romania

Nr. Crt.	Autori	Titlul	Journal	FI/SRI
1.	A. Latif, M. Postolache M.O. Alansari:	Numerical reckoning common fixed point inCAT(0) spaces for a general class of operators.	U. Politeh. Buch. Ser A. 84(2022), No. 2, 3-12	N/A
2.	Pripoae, C.L., Hirica, I.E., Pripoae, G.T., Preda, V.	Lie symmetries of the nonlinear Fokker-Planck equation based on weighted Tsallis entropy	Carpathian Journal of Mathematics, 38, 3, 597-617, 2022	FI = 1.778
3.	Rădulescu C. Z., Rădulescu M. , Filip F. G.	Cloud provider selection a complex multicriteria problem	Romanian J. of information science and technology, Vol. 24, No. 4, (2021), 337–352	FI = 0,852
4.	Vivek Singh; Anurag Jayswal; Ioan Stancu-Minasian Andreea Madalina Rusu-Stancu	Duality for a class of nonsmooth semi-infinite multiobjective fractional optimization problems	U.P.B. Sci. Bull., Series A, Vol. 84, Iss. 2, 2022, 61-68.	FI = 1,160

Alte reviste în străinătate

Nr. Crt.	Autori	Titlul	Journal
1.	B.B. Upadhyay; I.M. Stancu-Minasian ; Priyanka Mishra; R.N. Mohapatra	On generalized vector variational inequalities and nonsmooth vector optimization problems on Hahamard manifolds involving geodesic approximate convexity	Advances in Nonlinear Variational Inequalities 25(2022)2, 1-25

2.2. Capitle în volume colective

Edituri străinătate

Nr. Crt.	Autori	Titlul Capitolului	Titlul volumului	Editura
1.	Radulescu, C.Z., Radulescu, M. , Boncea, R.	A combined VIKOR-TOPSIS method with application, in Cloud Services Provider selection. In Intelligent Methods Systems and Applications in Computing, Communications and Control	<u>Intelligent Methods Systems and Applications in Computing, Communications and Control</u>	Springer, 2023 AISC 1435, pp. 293-302.



Nr. Crt.	Autori	Titlul Capitolului	Titlul volumului	Editura
2.	B.B. Upadhyay; I.M. Stancu-Minasian ; Shivani Sain; Priyanka Mishra	Generalized Minty and Stampacchia vector variational-like inequalities and interval-valued vector optimization problems	Anurag Jayswal and Tadeusz Antczak (Eds.), Continuous Optimization and Variational Inequalities. 1st Edition	Chapman and Hall / CRC, 2022, pp. 199-221

2.3. Conferințe Internaționale

Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
1.	Ciprian Ceausescu, Bogdan Alexe	Cerebral Metastases Segmentation using Transfer Gliomas Learning and GrabCut	SYNASC 2022, Austria	12-15 septembrie 2022
2.	Bădin, L. , Mastromarco, C., Lagravinese, R.	Performance Assessment of the Italian Healthcare System Using Conditional Nonparametric Efficiency Models	Statistical Modeling with Applications StatMod2022/România	14-15 octombrie 2022
3.	Bădin, L. , Mastromarco, C., Lagravinese, R.	Performance Assessment of the Italian Healthcare System Using Conditional Nonparametric Efficiency Models	The 17th European Workshop of Efficiency and Productivity Analysis (EWEPA XVII)/Portugalia	27-30 iunie 2022
4.	M. Beldiman , A.D. Halanay	Pseudolinear programming problems and pseudoaffine variational inequalities	GCM XIII (Generalized Convexity and Monotonicity), Online Symposium, Arequipa, Peru	13-16 sept. 2022
5.	Suter, F. , Preda, V. , Cernat, I.	Some Information Measures for the Concomitants of m-GOS from a Gumbel's Bivariate Exponential Distribution	14th International Conference on Ordered Statistical Data OSD 2022/ Italia	24-27 mai 2022



Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
6.	Hirica, I.E., Pripoae, G.T., Pripoae, C.L., Preda, V.	Applications of Lie symmetries associated to nonlinear Fokker-Planck equation based on different weighted entropies	Statistical Modeling with Applications StatMod 2022/ România	14-15 octombrie 2022
7.	Sfetcu, R.C., Sfetcu, S.C., Preda, V.	Divergences between probability measures	Statistical Modeling with Applications StatMod 2022/ România	14-15 octombrie 2022
8.	Catana, L.I., Preda, V.	Application of order statistics in the study of earthquakes	Statistical Modeling with Applications StatMod 2022/ România	14-15 octombrie 2022
9.	Radulescu M. , Radulescu S.	Limit of powers of matrices with applications to Markov chains	StatMod 2022, Romania, Bucuresti	14-15 octombrie 2022
10.	Suter, F.	Generalized exponential distributions with applications in systems reliability	StatMod2021, Statistical Modeling and Applications, online	3-4 decembrie, 2021 Neraportată în 2021
11.	Suter, F.	Dynamic information measures for the concomitants of order statistics	StatMod2022, Statistical Modeling and Applications, Romania	14-15 octombrie, 2022
12.	Aida Toma , Amor Keziou	Robust Minimum Empirical Divergence Estimators for Moment Condition Models	7th Stochastic Modeling Techniques and Data Analysis International Conference and Demographics 2022 Workshop, Athens, Greece	7-10 Iunie 2022
13.	Aida Toma , Amor Keziou, Luiza Badin, Silvia Dedu	Robust Pitman type Estimators for Moment Condition Models	24th International Conference on Computational Statistics (COMPSTAT 2022), Bologna, Italy	23-26 August 2022
14.	Aida Toma , Amor Keziou, Luiza Badin, Silvia Dedu	Robust Estimators for Moment Condition Models	StatMod 2022, Statistical Modeling with Applications, Bucharest, Romania	14-15 Octombrie 2022



Institutul de Statistică Matematică și Matematică Aplicată
"Gheorghe Mihoc – Caius Iacob" al Academiei Române
Calea 13 Septembrie, nr. 13, sector 5, 050711 București
Tel. 021 318 2433 Fax 021 318 2439
E-mail: office@ismma.ro

Naționale

Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
1.	Andreea Madalina Rusu-Stancu and I.M. Stancu-Minasian	Wolfe and Mond-Weir duality for multiobjective programming problems involving higher-order invex functions	The 23th Annual Conference of the Romanian Society for Probability and Statistics, IMAR	November 18-19, 2022



3. Colectivul Probabilități și Procese Stocastice

3.1. Articole publicate

Reviste ISI strainatate

Nr. Crt.	Autori	Titlul	Journal	FI/SRI
1.	Tudor Ionescu, Orest Iftime, Ion Necoara	Model reduction with pole-zero placement and high order moment matching	Automatica, 138, doi: 10.1016/j.automatica.2021.110140 2022 (Q1 ais - Automation & Control Systems)	FI=6.1
2.	Ion Necoara, Nitesh K. Singh	Stochastic subgradient projection methods for composite optimization with functional constraints	Journal of Machine Learning Research, 23 (265), 1-35, 2022 (Q1 ais – Computer Science)	FI=2
3.	I. Necoara, T. C. Ionescu	OPTIMAL H_2 MOMENT MATCHING-BASED MODEL REDUCTION FOR LINEAR SYSTEMS BY (NON)CONVEX OPTIMIZATION	MDPI Mathematics 2022, 10(10), 1765; https://doi.org/10.3390/math10101765	FI=2,592
4.	Anișoara Maria Răducan, Constanța Zoie Rădulescu, Marius Rădulescu, Gheorghită Zbăganu	On the Probability of Finding Extremes in a Random Set	Mathematics 2022, 10(10), 1623 https://doi.org/10.3390/math10101623	FI=2,592
5.	Anișoara Maria Răducan, Gheorghită Zbăganu	The Leader Property in Quasi Unidimensional Cases	Mathematics 2022, 10(22), 4199 https://doi.org/10.3390/math10224199	FI=2,592
6.	G.I. Sebe, D. Lascu	Two asymptotic distributions related to Rényi-type continued fraction expansions	Periodica Mathematica Hungarica 2022, https://doi.org/10.1007/s10998-021-00444-4	FI=0,940
7.	G.I. Sebe, D. Lascu	Some asymptotic results for the continued fraction expansions with odd partial quotients	Turkish Journal of Mathematics, 2022, 46 (7), pp.3011-3024, https://doi.org/10.55730/1300-0098.3315	FI=0,954
8.	Zbaganu Gh.	<u>On the Semi-Group Property of the Perpendicular Bisector in a Normed Space</u>	Axioms 2022, 11(3), 125	FI=1,824 Q2



Nr. Crt.	Autori	Titlul	Journal	FI/SRI
9.	Radulescu, C.Z., Radulescu, M., Zbaganu Gh., Boncea, R.	A Group Multi-Criteria approach for development of a country COVID-19 indicator	Procedia Computer Science 199 (2022) 149–156	Jurnal Elsevier

Reviste ISI România

Nr. Crt.	Autori	Titlul	Journal	FI/SRI
1.	Valentin Ionescu	A proof of the central limit theorem for c-free quantum random variables * *Neinclus in Raportul ISMMA pe 2021	Proceedings of The Romanian Academy, Series A., vol. 22, nr. 4/2021, pag. 317-324.	FI(2020-WoS) 1.523

3.2. Conferințe Internationale

Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
1.	Flavia Chorobura, Daniela Lupu, Ion Necoara	Conference on Decision and Control	Cancun, Mexic	6-9 dec. 2022
2.	Gheorghită Zbăganu, Anișoara Maria Răducan	“What is the chance to have a leader in a random set?”	THE 29th CONFERENCE ON APPLIED AND INDUSTRIAL MATHEMATICS, Chisinau, Republica Moldova	August 25-27, 2022
3.	Gheorghită Zbăganu, Anișoara Maria Răducan	“Making tops: what is the chance to get a leader?”	Statistical Modeling with Applications 2022 , October 14-15, 2022; Bucharest, Romania	October 14-15, 2022;
4.	Gheorghită Zbăganu, Anișoara Maria Răducan	On the existence of a leader in a random set	The 23rd Conference of the Romanian Society of Probability and Statistics, Bucharest, 18-19 November, 2022	18-19 November, 2022
5.	G.T. Prajitura, G.I. Sebe, C. Udriste	Linear Dynamics: where do we go from here	28 th International Conference in Operator Theory, West University of Timisoara, Timisoara, Romania	27 iunie - 1 iulie 2022
6.	G.T. Prajitura, G.I. Sebe	Some Open Problems in Linear Dynamics	5 th Northeast Analysis Network (NAN), University at Albany, State University of New York, Albany, NY, SUA	16-17 septembrie 2022
7.	G.T. Prajitura, G.I. Sebe	A Covering Property	Mathematical Association of America (MAA) Seaway Section, Siena College Loudonville, NY, SUA	28-29 octombrie 2022



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Nationale

Nr. Crt.	Autori	Titlul conferinței	Conferința/Tara	Data
1.	G.T. Prajitura, G.I. Sebe	Chaos versus Entropy in Linear Dynamics	Fourth Romanian Itinerant Seminar on Mathematical Analysis and its Applications, Transilvania University of Brasov	19-21 Mai 2022



4. Manifestari cu participare internaționala organizate/co-organizate de ISMMA

Nr. Crt.	Denumire Manifestari	Perioada
1.	The 29th Conference on Applied and Industrial Mathematics, CAIM 2022/ Chisinau, Republic of Moldova, co-organizator	25-27 August, 2022
2.	Workshop Statistical Modeling with Applications StatMod 2022, co-organizator	14-15 Octombrie 2022
3.	The 23 rd Conference of the Romanian Society of Probability and Statistics, co-organizator	18-19 Noiembrie 2022

5. Contracte de cercetare derulate prin ISMMA

Nr. Crt.	Responsabilul de contract	Contract(Denumire, Autoritatea)	Valoare lei 2022
1.	M. Farcaseanu	PN-III-P1-1.1-PD-2021-0037 (Exploring properties of several classes of partial differential equations, UEFISCDI)	250000 lei (etapa 2022: 60000 lei)
2.	G. Marinoschi	Analysis and Optimization of mathematical models ranging from bio-medicine to engineering, acord bilateral Academia Romana-CNR Italia	20.000 lei (4000 euro, etapa 2022)
3.	Ion Necoara	UEFISCDI, PNIII-PCE-2021-0720, proiect L2O-MOC, contract no. 70/2022, Romania (Învățând să optimizăm: de la fundamente matematice la aplicații în modelare și control)	1.200.000 lei (etapa 2022: 195.000 lei)



6. Membri în comitete editoriale

Nr. Crt.	Numele si Prenumele	Numele Revistei
1.	ION Stelian	1. ROMAI Journal
2.	MARIN Liviu	1. Engineering Analysis with Boundary Elements (Elsevier), 2. Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science (Editura Academiei Române) 3. Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie (Editura Universității din București), ISSN: 1220-3874
3.	MARINOSCHI Gabriela	1. Evolution Equations and Control Theory - internationala 2. Mathematical Reports - AR 3. Revue Roumaine de Mathématiques Pures Appliquées - AR 4. Journal of Numerical Analysis and Approximation Theory 5. Topical editor: Proceedings of the Romanian Academy Series A
4.	MICU Sorin Daniel	1. Acta Applicandae Mathematicae, 2. Mathematical Control and Related Fields (MCRF);
5	NECOARA Ion	1. Associate editor at Computational Optimization and Applications (Springer journal) 2. Associate editor at IEEE Transactions on Automatic Control (IEEE journal)
6.	STANCU Ioan	1. Applied Medical Informatics, 2. Advanced Modeling and Optimization (an electronic International Journal), 3. International Journal of Optimization (Theory, Methods and Application), 4. International Journal of Mathematical Modeling, 5. Simulation and Applications (IJMMSA), 6. Journal of Numerical Analysis and Approximation Theory - AR 7. International Journal of Mathematical Modeling and Computing (IJMMC), 8. Journal of the Egyptian Mathematical Society.
7	TOMA Aida	1. Open Journal of Statistics, 2. International Journal of Advanced Statistics and Probability;
8	VÎLCU Gabriel Eduard	1. International Journal of Maps in Mathematics 2. Mathematics 3. Tamkang Journal of Mathematics 4. Moroccan Journal of Algebra and Geometry with Applications