ACADEMIA ROMÂNĂ
Institutul de Statistică Matematică şi Matematică Aplicată
"GHEORGHE MIHOC- CAIUS IACOB"
Casa Academiei Române, Calea 13 Septembrie nr.13
050711 Bucureşti
Telefon: (+40-1) 021.318.24.33

DARE DE SEAMĂ PE ANUL 2012

Cărţi apărute în edituri consacrate din străinătate

1. A. Favini, **G. Marinoschi**, *Degenerate Nonlinear Diffusion Equations,* Lecture Notes in Mathematics 2049, Springer, Berlin, New Yook, 2012.

2. **Popa C.**, *Projection algorithms - classical results and developments. Applications to image reconstruction*, Lambert Academic Publishing - AV Akademikerverlag GmbH & Co. KG, Saarbruecken, Germany, 2012.

3. **Dumitru Popescu,** *The Pulsatory Lipid Vesicle Dynamics Under Osmotic Stress*. ISBN 978-3-659-11086-3. Lambert Academic Publishing - AV Akademikerverlag GmbH & Co. KG, Saarbruecken, Germany, 2012.

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1. Iordache V., Lacatusu R., Scradeanu D., Onete M., **Ion S**., Cobzaru I., Neagoe A., Bodescu F., Jianu D., Purice D., *Contributions to the theoretical foundations of integrated modeling in biogeochemistry and their application in contaminated areas*, in Bio-Geo-Interactions in Metal-Contaminated Soils, Kothe E, Varma A, (eds), Springer, pp. 385-418, 2012.

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7. Teodorescu, S., **Vernic, R.** - "*On composite Pareto models*". Mathematical Reports 14 (64), no. 3, 2012. (**FI: 0.273**)

8. Rădulescu S., **Rădulescu M.**, Diaz Barrero J. L., Alexandrescu P., *Two Families of Cyclic Inequalities,* Mathematical Inequalities and Applications, Vol. 15, No. 1, (2012), 199–209. (**FI: 0.524** in 2011)

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13. **G. Marinoschi**, A *Trotter–Kato type theorem in the weak topology and an application to a singular perturbed problem,* J. Math. Anal. Appl., 386, 1, 50-60, 2012, DOI:10.1016/j.jmaa.2011.07.039, (**FI: 1.174**, **SRI : 1.11491**)

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2. A. Jayswal, **I.M. Stancu-Minasian**, *On sufficiency and duality in multiobjective subset programming problems involving generalized d-type I univex functions*, J. Appl. Math. Inf. 30 (2012) 1-2, 111-125

3. **Adrian Carabineanu,** *Free Boundary Seepage from Asymmetric Soil Channels*, Int. J. Math. Math. Sci., vol. 2012(2012), Article ID 353917, 15 pag.

4. **H. Dumitrescu, V.Cardos, F. Fruzulica, A.Dumitrache,** "Determination of angle of attack for rotating blades "INCAS Bulletin ,Vol.4, Issue 2, 2012, 37-42

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10. **Dumitrache Alexandru, Frunzulica Florin** and Ionescu Tudor, *Mathematical Modelling and Numerical Investigations on the Coanda Effect*, Nonlinearity, Bifurcation and Chaos - Theory and Applications (ISBN 979-953-307-1091-9), Revue Roumaine de Math. Pures et Appl. nr. 3, 2012.

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1. **U. Paun**, *P(X(s) apartine A(s), X(s+1) apartine A(s+1),...,X(t) apartineA(t)) in the Markov chain case: from an upper bound to a method*, Rev. Roumaine Math. Pures Appl. 37(2012), no. 2.

2. **V. Ionescu**, *A note on amalgamated monotone, anti-monotone, and ordered- free products of operator-valued quantum probability spaces*, Revue Roumaine de Math. Pures et Appl. nr. 3, 2012.

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1. **G. Marinoschi,** *A variational approach to nonlinear diffusion equations with time periodic coefficients,* Annals of the University of Bucharest (mathematical series), 3 (LXI), 173-185, 2012.

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2. **G. Marinoschi**, *An optimal control problem for a singular system of solid-liquid phase transition*, MathProSpeM2012, April 16-21, 2012, Roma, Italia, (conferinta plenara)

3. **G. Marinoschi**, *An inverse problem in nonlinear diffusion equations in porous media*, Evolution Problems and Applications, Bari, July 13, 2012 (conferinta plenara)

4. **G. Marinoschi**, *Existence to Time-Dependent Nonlinear Diffusion Equations via Convex Optimization*, PDEs, Inverse Problems and Control Theory, July 16-20, 2012, Bologna, Italia (conferinta plenara)

5. **G. Marinoschi**, *Bio-materials and chemotaxis*, ADMAT 2012, Cortona, September 17-21, 2012 (conferinta plenara)

6. **G. Marinoschi**, *Global existence for a cross-diffusion model in a stratified medium, PDEs and Stochastic Processes*, The 5th Workshop Series on Mathematics, October 12-14, 2012, Piteşti, Romania (conferinta plenara)

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9. **Bădin, L.**, Daraio, C., Simar, L., *Addressing the Bias Correction Issue in Nonparametric Frontier Models*, *V IIth* North American Productivity Workshop (NAPW VII), 6-9 Iunie 2012, Houston, Texas.

10. **Bădin, L.**, Daraio, C., Simar, L., *Explaining Inefficiency in Nonparametric Production Models: the State of the Art*, *V IIth* North American Productivity Workshop (NAPW VII), 6-9 Iunie 2012, Houston, Texas.

11. **B. Alexe**, N. Heess, ,Y. Teh, V. Ferrari, *Searching for objects driven by context*, In curs de publicare la NIPS – Neural Information Processing Systems, Lake Tahoe, Nevada, USA, December 2012

12. **Radulescu M.,** Radulescu C. Z., Radulescu S., *Applications of portfolio theory to production planning for fish farms*, Conferinta EURO XXV, Vilnius, Lituania, 2012

13. **Radulescu M.,** Radulescu S., Radulescu C. Z., *The efficient frontiers of mean – variance portfolio selection problems*, Conferinta 21st International Symposium on Mathematical Programming (ISMP), Berlin, 2012.

14. Radulescu C. Z., **Radulescu M.,** Radulescu S., *Portfolio selection models with complementarity constraints*, Conferinta 21st International Symposium on Mathematical Programming (ISMP), Berlin, 2012.

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16. Radulescu S., **Radulescu M.,** *Generalizations of subharmonic functions*, 11-ème Colloque Franco-Roumain de Mathématiques Appliquées, Bucuresti, 2012

17. Radulescu S., **Radulescu M.,** Alexandrescu P., *Certaines généralisations et des extensions de fonctions de Schur*, 11-ème Colloque Franco-Roumain de Mathématiques Appliquées, Bucuresti, 2012

18. Vinicius Almendra, **Denis Enachescu,** *A fraudster in a haystack: crafting a classifier for non-delivery fraud prediction at online auction sites*, SYNASC2012, Timisoara, Romania

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22. **Gheorghita Zbaganu**, *Portfolio theory: when diversification is necessary*, European Conference on Operational research, Vilnius 8-11 iulie 2012

23. **Valentin Ionescu:** *Some multivariate results in the operator-valued conditionally free probability theory,* XI-eme Colloque Franco-Roumain de Mathematiques Appliquees (Section 5: Matrices aleatoires et Probabilites libres),Bucuresti, 24-30 August 2012.

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39. **Popa C**., *Iterative regularized solution of linear complementarity problem*, SIAM Conference on Applied Linear Algebra, Valencia, Spain June 18 - 22, 2012

40. **Dumitru Popescu,** Alin Gabriel Popescu, *The effect of the internal liquid viscozity on the pulsatory lipid vesicle dynamics*, The Second International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences "IC-ANMBES-2012", May 24th-27th, 2012, Brasov.

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44. **O. Simionescu-Panait,** *Energy estimates for TH-wave propagation in a pre-stressed layered formation,* 11-eme Colloque Franco-Roumain de Mathematiques Appliquees, Univ. Bucureşti, aug. 2012.

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10. **Gheorghita Zbaganu**, *Despre diversificare in teoria portofoliilor*, A 15-a Conferintă a Societătii de Probabilităti si Statistică din România, 27 Aprilie 2012, Bucuresti, România

11. **Mariana Sibiceanu**, *Asymptotic exponential inequalities for empirical measures*

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12. **Mioara Buiculescu**, *Asymptotic properties for a class of non-singular Feller processes,* A 15-a Conferintă a Societătii de Probabilităti si Statistică din România, 27 Aprilie 2012, Bucuresti, România

13. **Udrea Paun**, *Upper bounds for P(X<k) and P(X=k),* A 15-a Conferintă a Societătii de Probabilităti si Statistică din România, 27 Aprilie 2012, Bucuresti, România

14. **Stelian Ion**, *Mathematical modeling of soil erosion*, Conferinta Caius Iacob, 10-12 Octombrie Bucuresti

15. **Stelian Ion**, *PDE and CA Models of Soil Erosion*, The Nineth Workshop on Mathematical Modelling of Environmental and Life Sciences Problems, November 2, 2012.

16. **Anca Veronica Ion**, *Study of behavior of density of proliferating cells in a delay differential equations model of leukemia*, Workshop on Mathemathical Modelling of Environmental and Life Science, Constanta, 2-3 noiembrie 2012.

17. **Stefan Gicu-Cruceanu, Dorin Marinescu**, *Parameter Estimation for Survival Models*, The Nineth Workshop on Mathematical Modelling of Environmental and Life Sciences Problems, November 2, 2012.

18. **Dumitru Popescu**, Alin Popescu, *The effect of the internal liquid Viscozity on the Pulsatory Lipid Vesicle Dynamics*, The Nineth Workshop on Mathematical Modelling of Environmental and Life Sciences Problems, November 2, 2012.

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2. **Bădin, L.,** Daraio, C., Simar, L. (2012), *Explaining inefficiency in nonparametric production models: the state of the art*, Annals of Operations Research, DOI: 10.1007/s10479-012-1173-7, Springer (**FI: 0.840**, **SRI: 1.17433**)

3. **Rădulescu M**., Rădulescu C.Z., **Zbaganu Gh**., *A portfolio theory approach to crop planning under environmental constraints*, Annals of Operations Research, DOI: 10.1007/s10479-011-0902-7, (lucrare publicata online in jurnal cotat ISI) (2011 (**FI: 0.840**)

4. **Alexandru Agapie**, Mircea Agapie, **Gheorghita Zbaganu,** *Evolutionary algorithms for continuous space optimisation*, International Journal of Systems Science, DOI:10.1080/00207721.2011.605963, 2011

Lista granturilor din străinătate

1. **Denis Enăchescu (**member in the Management Committee)**,** Marius Popescu, **Cornelia Enăchescu**, Ion Iancu, **Alexandru Agapie**, Liviu Ciortuz, *Cognitive Radio and Networking for Cooperative Coexistence of Heterogeneous Wireless Networks, COST Action I0902,*
http://w3.cost.esf.org/index.php?id=177&action_number=IC0902

2. **Denis Enăchescu (**member in the Management Committee)**, Cornelia Enăchescu**, Marius Popescu, Lixăndroiu Dorin, **Alexandru Agapie**, Dalia Simona Miron, **Luiza Bădin**, Flavian Ştefan Rădulescu, *Knowledge Discovery from Moving Objects (MOVE), COST Action I0903* member in the Management Committee
http://w3.cost.esf.org/index.php?id=177&action_number=IC0903

Lista granturilor în curs de derulare în acest an în ţară (MEC)

1. **Miruna Beldiman**, Contract PN-II-RU-PD-2011-3-0102 nr. 7/05.10.2011. Titlul: *Probleme de echilibru abstracte si aplicatii*. Director (valoare 2012: 180.000 lei)

2. **Horia Dumitrescu**, Contract PN 40 parteneriate, *Sistem hibrid de energie regenerabila bazat pe turbina eoliana cu ax vertical cu panouri fotovoltaice integrate si suspensie magnetica,* Coordonator proiect (valoare 2012: 134 500 lei)

3. **Marius Rădulescu**, Contract PD 7, Program IDEI_Proiecte de Cercetare Exploratorie_Competitie 2011, grantul intitulat: *Portfolio selection models and applications*, Director (valoare 2012 : 337.500 lei)

4. **Stelian Ion**, Contract PN 50 parteneriate, ASPABIR, (valoare 2012: 55 000 lei)

Manifestări ştiinţifice organizate de institut

1. Internationale Conference of Aerospace Sciences "Aerospatiale 2012", Bucuresti, 11-12 Octombrie, 2012,

2. Conferinta "Caius Iacob" de Mecanica Fluidelor si Aplicatiile ei Tehnice, Bucuresti, 10-12, Octombrie, 2012,

3. Ninth Workshop on Mathematical Modeling of Environmental and Life Sciences Problem, Constanta, 1-4 Noiembrie, 2012.

Lista lucrărilor elaborate în cursul anului 2012 în cadrul fiecărei teme de cercetare

Programul de cercetare nr. 1: Ananliza stocastică: probleme speciale de convergenţă a variabilelor aleatoare, de teoria probabilistă a numerelor, de teoria proceselor Markov şi calcul stocastic.

1. **Mioara Buiculescu,** *Proprietăţi de convergenţă asociate proceselor Feller cu explozie rapidă.*
2. **Valentin Ionescu**, *A matrix Cauchy-Schwarz type inequality and the Boolean product of operator-valued linear maps defined on involutive algebras*, Proc. Ro. Acad. Series A, vol. 13 (2012), nr. 3, 191-197.
3. **Valentin Ionescu**, *A note on amalgamated monotone, anti-monotone, and ordered-free products of operator-valued quantum probability spaces*, Revue Roumaine de Math. Pures et Appl. nr. 3, 2012.
4. **Udrea Păun,** *Perturbed finite Markov chains.*
5. **Udrea Păun,** Δ-*ergodic theory and simulated annealing.*
6. **Aurel Spătaru,** *Upper bounds for series involving moderate and small deviations.*
7. **Aurel Spătaru,** *Series of Tail Distributions of Finitely Inhomogeneous Random Walks.*
8. **Aurel Spătaru,** *The law of the iterated logarithm for filitely inhomogeneous random walks*

Programul de cercetare nr. 2: Modele statistice multidimensionale, liniare şi neliniare, cu aplicaţii

1. **Alexandru Agapie**, *Teoria algoritmilor evoluţionari. Modelare stochastică.*
2. T. Deselaers, **B. Alexe**, V. Ferrari, *Weakly Supervised Localization and Learning with Generic Knowledge*, International Journal of Computer Vision, 100(3), p.257-293, September 2012. (**FI: 5.358**)
3. **B. Alexe**, T. Deselaers, V. Ferrari, *Measuring the objectness of image windows*, Pattern Analysis and Machine Intelligence, 34(11), 2189-2202, November 2012. (**FI: 4.908**, in 2011)
4. **Bădin, L.**, Daraio, C., Simar, L. (2012), *How to measure the impact of environmental factors in a nonparametric production model*, European Journal of Operational Research, vol. 223, nr. 3, pp 818-833, Elsevier. (**FI: 1.815** , **SRI: 1.40412**).
5. **Voicu Boşcaiu,** *Modele statistice în bioinformatică*
6. **Cornelia Enăchescu,** *Mixed models analysis. Applications to the medical data.*
7. **CorneliaEnăchescu,** *Modele statistice pentru studiul bioechivalenţei medicamentelor*
8. **Cornelia Enăchescu,** *Kernel for in vitro dissolution profile comparision*
9. Vinicius Almendra, **Denis Enachescu,** *A fraudster in a haystack: crafting a classifier for non-delivery fraud prediction at online auction sites*

10. **Denis Enăchescu,** *Methods for approximating the distribution of a randomly weighted sum of random variables using kernel and neural network methods*
11. **Florentina Suter,** Francesca Collet, Fabrizio Leisen, Fabio Spizzichino, *Exchangeable Occupancy Models and Discrete Processes with the Generalized Uniform Order Statistics Property*
12. **Aida Toma,** Samuela Leoni-Aubin, *Optimal robust M-estimators using Renyi pseudodistance,* Journal of Multivariate Analysis (FI: 0.879, SRI :1.01103)
13. **S. L. Vasile**, L. Velcescu, *Optimization of a set of database queries based on an estimation of the selectivity factor,* A 15-a Conferintă a Societătii de Probabilităti si Statistică din România, 27 Aprilie 2012, Bucuresti, România
14. **S. L. Vasile**, L. Velcescu, *Inequalities between the relational result sets cardinalities in random databases*
15. Teodorescu, S., **Vernic, R.** - *"On composite Pareto models"*. Mathematical Reports 14 (64), no. 3, 2012. (**FI: 0.273**)

Programul de cercetare nr. 3: Modele speciale de programare matematică şi optimizare neliniară cu aplicaţii

1. **Miruna Beldiman,** *Teoria echilibrului, Inegalităţi variaţionale, Optimizare matematica, Programare neliniara, Mecanica solidelor.*
2. **Marius Rădulescu,** *Modelare matematica, cercetari operationale, teoria portofoliilor, programare matematica.*
3. **Vasile Preda,** *Optimizare matematica, Programare neliniara, Teoria echilibrului, Inegalitati variationale, Actuariat, Teoria informatiei.*
4. **Ioan M. Stancu-Minasian,** *Optimality and duality in nonlinear programming involving semilocally b-preinvexe and related functions.*
5. **Ioan M. Stancu-Minasian,** *Optimality conditions for nonlinear programming with mixed constraints and ρ-locally arcwise connected functions.*
6. **Andreea Mădălina Stancu,** *Optimality and duality in nonlinear programming involving ρ-semilocally b-preinvexe and related functions.*

Programul 4: Studiul teoretic(calitativ si cantitativ) si numeric pentru sistemele dinamice

1. **O. Simionescu-Panait,** *Energy estimates for TH-wave propagation in a pre-stressed layered formation,* 11-eme Colloque Franco-Roumain de Mathematiques Appliquees, Univ. Bucureşti, aug. 2012.

2. **C. P. Grunfeld, D. Marinescu**, *A Note on a Discretized Approximation of the Boltzmann Equation in the Whole Space*

3. **Stefan Gicu-Cruceanu, Dorin Marinescu**, *Parameter Estimation for Survival Models*, The Nineth Workshop on Mathematical Modelling of Environmental and Life Sciences Problems, November 2, 2012.

Programul 5: Metode numerice si analitice in studiul miscarii fluidelor.

1. **Adrian Carabineanu**, *L'application de la methode des elements complexes de*

frontiere a l'etude da l'ecoulement potential autours des profiles submerges, XIeme Colloque Franco-Roumain de Math. Appl., Bucarest, 24-30 Aout 2012

2. **Alexandru Dumitrache**, **Florin Frunzulica**, *Unsteady convective diffusion of a solute in a Hagen-Poiseuille flow through a tube with permeable wall*; GAMM 2012, Technische Universität Darmstadt, March 26 \u2013 30, 2012

3. **Florin Frunzulica**, Razvan Mahu, **Horia Dumitrescu,** *Stall-Delay Phenomenon for Horizontal Axis Wind Tubine,* ICNPAA 2012 World Congress: 9th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences, Vienna University of Technology, Austria, July 10 - July 14, 2012.

4. **Alexandru Dumitrache**, **Florin Frunzulica**, **Horia Dumitrescu**, Razvan Mahu, *Active and Passive Circulation Control as Enhancement Techniques of Wind Turbines Performances,* ICNPAA 2012 World Congress: 9th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences, Vienna University of Technology, Austria, July 10 - July 14, 2012.

Programul 6: Modelare matematica in stiintele vietii si mediului

1. E.R. Ardeleanu, **G. Marinoschi**, *An asymptotic solution to a nonlinear reaction-diffusion system with chemotaxis,* under review, **Num. Func. Anal. Optim**., acceptata, FI= 0.711

2. M. Iannelli, **G. Marinoschi**, *Numerical solution to the population dynamics model by parabolic regularization,* **Math. Meth. Appl. Sci**.*,* 2012, in press, FI= 0.743 DOI: 10.1002/mma.2675

3. A. Favini, A. Lorenzi, **G. Marinoschi,** H. Tanabe, *Perturbation methods and identifcation problems for degenerate evolution systems*, **Proc. of the 7th Congress of Romanian Mathematicians**, June 29-July 5, 2011, Brasov, Romania, in press

4. G. Marinoschi, *A variational approach to nonlinear diffusion equations with time periodic coefficients*, **Annals University of Bucharest**, accepted.

5. M. Beldiman, I. Boaca, **G. Marinoschi**, *Optimization of a singular flow in a porous mediu,* ZAMM, acceptata, FI =0.863

6. **Stelian Ion**, *Mathematical modeling of soil erosion*, Conferinta Caius Iacob, 10-12 Octombrie Bucuresti

7. **Stelian Ion**, *PDE and CA Models of Soil Erosion*, The Nineth Workshop on Mathematical Modelling of Environmental and Life Sciences Problems, November 2, 2012.

8. **Anca Veronica Ion**, *Study of behavior of density of proliferating cells in a delay differential equations model of leukemia*, *Workshop on Mathemathical Modelling of Environmental and Life Science,* Constanta, 2-3 noiembrie 2012.

9. **Dumitru Popescu** and Alin Popescu, *The effect of the internal liquid Viscozity on the Pulsatory Lipid Vesicle Dynamics*, The Nineth Workshop on Mathematical

Modelling of Environmental and Life Sciences Problems, November 2, 2012.

10. **A.M. Morega**, *Numerical modeling of nano-polymer carriers transport in magnetic drug targeting*, International Workshop Polymer Nanocomposites, 14-16 May, 2012, COST MP0701, Helsinki, Finland

11. **Popa C.**, *Iterative regularized solution of linear complementarity problem*, SIAM Conference on Applied Linear Algebra, Valencia, Spain June 18 - 22, 2012