

Anul 2007

## Books

1. **Marius Iosifescu** (în colaborare cu N. Limnios and Gh. Opreșan), *Modèles stochastiques*, 332 pagini. Hermes-Sciences-Lavoisier, Paris, 2007.
2. **Marius Iosifescu**, *Finite Markov Processes and Their Applications*, 295 pagini (Corrected republication of the edition published by Wiley, New York, 1980) Dover, Minesota, New York, 2007.
3. **Alexandru Agapie**, *Evolutionary algorithms – modeling and convergence*, 2007, ISBN 978-973-27-1509, Editura Academiei Române, 2007, 115 p.
4. **Horia Dumitrescu**, **V.Cardos**, **F.Frunzulică**, **A.Dumitrache**, *Aerodinamică nestaționară, aeroelasticitate și aeroacustică pentru turbine de vânt*. Editura Academiei Române, 530 pagini, 2007.
5. **Cornelia Enăchescu**, A. Constantinescu, *Modele statistice în cazul măsurătorilor repetate. Aplicații în teledetecția datelor din agricultură*, 2007, Ed. Bibliotheca (Ed. Acreditată CNCSIS cu avizul 1142/30 iunie 2003, reacreditată în mai 2006), ISBN 978-973-712-229-2, 126 pagini.
6. **Mihai Popescu**, *Procese variationale tranzitorii și analiza neliniară în controlul optimal*. Ed. Tehnică, 2007, 432 pagini.

## Chapters in books

1. **Denis Enăchescu**, L.P. Dinu, *Languages Similarity. Measuring and Testing*, Recent Advances in Stochastic Modelling, Ed. Ch. H. Skiadas, ISBN 978-981-270-968-4, World Scientific, 2007, 512-521.
2. **Denis Enăchescu**, L.P. Dinu, 2007, *On clustering Romance Languages*, Recent Advances in Stochastic Modelling, Ed. Ch. H. Skiadas, ISBN 978-981-270-968-4, World Scientific, 521-529.
3. **Gabriela Marinoschi**, *Well-posedness for a non-autonomous model of fast diffusion*. In: Applied Analysis and Differential Equations (Editors: Ovidiu Carja, Ioan I. Vrăbie), 199- 216, World Scientific 2007, ISBN 978-981-270-594-5, 981-270-594-5.
4. **Andreea Mădălina Stancu**, *Optimality and duality in nonlinear programming involving  $p$ -semilocally  $b$ -preinvex functions*. In: Elisabetta Allevi, Marida Bertocchi, Adriana Gnudi and Igor Konnov (Eds.) *Nonlinear Analysis with Applications in Economics, Energy and Transportation*, pp. 255-271. Bergamo University Press, Sestante Edizione, 2007.

## Articles

### International Journals

1. **Alexandru Agapie**, Agapie M. *Transition Functions for Evolutionary Algorithms on Continuous State-Space*. Journal of Mathematical Modelling and Algorithms, Springer, Springer 6 (2), 2007, pp. 297-315.
2. **Horia Dumitrescu**, **Vladimir Cardos**, *Prediction of 3-D separation on a rotating flow*. IJAME, 4(12), 2007, pp. 803-819.
3. **Cornelia Enăchescu**, *Evaluation of some statistical methods for referring women for bone densitometry*. Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, PWN - Polish Scientific Publishers, Warszawa, 2007, vol. 27, 3, p.43-59.
4. **Cornelia Enăchescu**, A. Constantinescu, *Using multilayer neural networks to estimate the parameters of the nonlinear Baret Model*. Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, PWN - Polish Scientific Publishers, Warszawa, vol. 27, 3, p.95-111.

5. **Cornelia Enăchescu**, Stéphane Milcent, Marianne Lorenzano, Denis Enăchescu, Philippe Birembaut, Frédéric Staerman. *La ploide cellulaire: facteur prédictif de cancer de prostate localement avancé*. *Progrès en Urologie* (ISSN 1761-676X); 2007, vol. 17, 4, p. 819-824.
6. **C. P. Grünfeld**, *Nonlinear Evolution Equation In and Ordered Space Arising from Kinetic Theory*. *Commun. Contemp. Math., Commun. Contemp. Mathematics*, Vol. 9, No. 2 (2007) pp 217 - 251.
7. **Dorel Homentcovschi**, and R. N., Miles, *Influence of viscosity on the reflection and transmission of an acoustic wave by a periodic array of screens. The general 3-D problem*. *Wave Motion*, 2007.
8. **Dorel Homentcovschi** and R. N., Miles, *Viscous microstructural dampers with aligned holes; Design procedure including the edge correction*. *Journal of Acoustical Society of America*, vol. 122, 2007, pp. 1556-1567.
9. **Dorel Homentcovschi** and R. N., Miles, *A boundary integral approach to analyse the viscous scattering of a pressure wave by a rigid body*. *Engineering Analyse with Boundary Elements*, vol. 31(2007), pp. 844-855.
10. Caterina Cusulin, Mimmo Iannelli, **Gabriela Marinoschi**, *Convergence in a multi-layer population model with age-structure*. *Nonlinear Analysis Real World Applications*, vol. 8(2007), pp. 887-902, 2007.
11. **Mihai Popescu**, *Sweep method in analysis optimal control for rendez-vous problems*. *Journal of Applied Mathematics and Computing*, Vol. 23, No. 1-2, 2007, pp. 243-237.
12. **Mihai Popescu**, **Alexandru Dumitrache**, *Stability of periodic solution for quasi-linear controlled systems in critical case*. *Dynamical Systems Theory and Applications*, Poland, vol.1(2007), pp. 379-387.
13. **Vasile Preda** și C. Fulga, *On optimality conditions for multiobjective optimizations problems in topological vector spaces*. *J. Math. Anal. Appl.* 334(1), 2007, 123-131.
14. Juncu Gh., Mosekilde E. and **Popa C**, *Numerical experiments with MG continuation algorithms*. *Applied Numerical Mathematics*, vol. 56, 2006, pp. 844 – 861.
15. **Olivian Simionescu –Panait**, *Attenuated wave propagation on a face of a cubic crystal subject to initial electro-mechanical fields*. *Int. J. of Applied Electromagnetics and Mechanics*, vol. 22, nr. 1-2, p. 111-120, IOS Press, 2005.
16. **Olivian Simionescu-Panait**, *Propagation of attenuated waves along an edge of a cubic crystal subject to initial electro-mechanical fields*. *Math. and Mech. of Solids*, vol. 12, nr. 1, p. 107-118, 2007.
17. **Marcel O. Vlad**, Alexandru Dan Corlan, Vlad T. Popa, and John. Ross, *On anti-portfolio effects in science and technology with application to reaction kinetics, chemical synthesis, and molecular biology*. *Proceedings of the National Academy (USA)*, 2007, 104, p.18398-18403.
18. Federico Moran, **Marcel O. Vlad**, M. Bustos, J.C. Trivino, J. Ross, *Species Connectivities and Reaction Mechanisms from Neutral Response Experiments*. *Journal of Physical Chemistry A.*, 2007, **111**, p.1844-1851.
19. **Marcel O. Vlad**, John Ross, *Inverse problems for reaction-diffusion systems with application to geographical population genetics*. *Advances in Chemical Physics*, 2007, **135**, p.173-187.
20. **Viorel Gh. Vodă**, *A new generalization of Rayleigh distribution. Reliability Theory and Applications*. *Journal of International Group of Reliability*, San Diego Cal. USA, vol II, nr. 2, June 2007, pp. 47 – 56.
21. **Gheorghită Zbăganu**, Laszlo Lakatos, *Waiting Time in Cyclic- Waiting Systems*. *Annales Univ. Sci. Budapestiansis, Sectio Computatorica*. Tom XXVII, (2007), 217 – 228.

### **Romanian Journals**

1. **Alexandru Agapie**, R. Höns, *Analysis of a Voter model*. *Math. Reports*, 9 (59), 2, 2007, pp.135-145.

2. **Alexandru Agapie**, M. Agapie, *On some theoretical properties of (1+1) evolutionary algorithms*. Revue Roumaine de Mathematique Pures et Appliquees, 52(3), 2007, pp. 287-303.
3. **Miruna Beldiman**, *Weighted variational inequalities with set- valued mappings*. Revue Roum. Math. Pures Appl. 52 (2007), no.3, 315-327.
4. **Mioara Buiculescu**, *Feller processes with fast explosion*. Rev. Roumaine Math. Pures Appl. 52 (2007) 6, 631-638.
5. **Cornelia Ciutoreanu**, *FEMLAB modelling for the diffusion of an age-structured population in a heterogeneous medium, in series Mathematical Modelling of Environmental and Life Sciences*. Eds. S.Ion, G. Marinoschi, C. Popa, Editura Academiei Romane, 2007, pp. 58-69.
6. Ulrich Herkenrath și **Marius Iosifescu**, *On a contractibility condition for itereted random functions*. Rev. Roum. Math. Pures Appl. Vol. 52, nr. 5, pp. 563-572.
7. **Stelian Ion**, Anca Ion and **Dorin Marinescu**, *Discret approximatio of Nonlinear Diffusion Equation*, in series Mathematical Modelling on Environmental and Life Sciences Problems, editors S. Ion, G. Marinoschi and C. Popa, Editura Academiei Române, 2007, pp. 99-109.
8. **Popa Constantin** Zdunek R., *On some constraining strategies in image reconstruction from projections*, in series Mathematical Modelling on Environmental and Life Sciences Problems, editors S. Ion, G. Marinoschi and C. Popa, Editura Academiei Romane, 2007, pp. 166-175.
9. Koestler H., **Popa Constantin**., Pruemmer M., Ruede U., *Algebraic full multigrid in image reconstruction*, in series Mathematical Modelling on Environmental and Life Sciences Problems, editors S. Ion, G. Marinoschi and C. Popa, Editura Academiei Romane, 2007, pp. 116-127.
10. Duluman T., **Popa Consatntin**, *Algebraic reconstruction technique versus conjugate gradient in image reconstruction from projections*, in series Mathematical Modelling on Environmental and Life Sciences Problems, editors S. Ion, G. Marinoschi and C. Popa, Editura Academiei Române, 2007, pp. 69-81.
11. Bautu A., Bautu E., **Popa Constantin**, *A weighted Kaczmarz algorithm in image reconstruction*, in series Mathematical Modelling on Environmental and Life Sciences Problems, editors S. Ion, G. Marinoschi and C. Popa, Editura Academiei Române, 2007, pp. 42-51.
12. **Popa Constantin**, *Kovarik's function orthogonalization algorithm with approximate inversion*, Revue d'Analyse Numerique et Theorie de l'Approximation, Tome 36, No. 1(2007), pp. 79-87.
13. **Olivian Simionescu Panait**, *Decomposition of waveguides propagating in piezoelectric crystals subject to initial fields* in series Mathematical Modelling on Environmental and Life Sciences Problems, editors S. Ion, G. Marinoschi and C. Popa, Editura Academiei Române, 2007, pp. 184-193.
14. **Mihai Popescu**, *On the variational process in singular optimal control*. Rev. Roum. Sci. Tech. Mec. Appl., Tome 52, No. 1, 2007, ISSN 0044-2275.
15. **Mihai Popescu**, **Alexandru Dumitrache**, „*Stability of periodic solution for quasi-linear controlled system.*”, Rev. Roum. Sci. Tech. Mec. Appl., Tome 52, No. 2, 2007, ISSN 0044-2275.
16. **Udrea Păun**, *Perturbed finite Markov chains*. Math. Reports 9 (59) (2007), 183-210.
17. **Udrea Păun**,  *$\Delta$ -ergodic theory and simulated annealing*. Math. Reports 9 (59) (2007), 279-303.
18. **Miruna Beldiman** și **Vasile Preda**, *Some existence results for a class of relatively B-pseudomonotone variational inequalities over product of sets*. Proc. Rom. Acad. 1(2007), 1-17.
19. A. Bătătorescu, **Vasile Preda** și **Miruna Beldiman**, *On higher order duality for multiobjective programming involving generalized  $(F, \rho, \gamma, b)$ - convexity*, Math. Reports 9(59), 2(2007), 161-174.
20. **Vasile Preda**, C. Balcau, *On maxentropic reconstruction of a multiple Markov chains*, Bull. Math, 2007.
21. **I.M. Stancu-Minasian** și **Andreea Mădălina Stancu**, *Duality for nonlinear fractional programming involving generalized  $\rho$ -semilocally  $b$ -preinvex functions*. Rev. Roum. Math. Pures Appl. Vol. 52, nr. 5, pp. 573-590.
22. **I.M. Stancu-Minasian**, *Institutul de Statistică Matematică și Matematică Aplicată „Gh-Mihoc-*

- Caius Iacob*” (ISMMA). *Academica*, Anul XVII, 197-198, Nr. 60-61, Martie-Aprilie 2007, 50-54.
23. **Gheorghiu Zbăganu** și Laszlo Lakatos, *Comparisons of G/G/1 queues*. Proc. Romanian Acad. Ser. A, Vol 8, no. 2/2007.
  24. **Gheorghiu Zbăganu**, *Convergence Properties of Optimal Predictors*, *Mathematical Reports*, 8(58), 3(2007), 223-241.
  25. **Voicu Boșcaiu** Bratosin D., Takacs L., Gheorghe A.-M., Sidoroff M., Tcacenco L., Ponopal C., Buruiana V., Hermenean A., Ardelean A., Montreuil J. and Marinescu Al. G., *Flow cytometric measurement of reactive oxygen species produced in aluminium mediated-apoptosis of Rana nucleated erythrocytes*. *Romanian Biological Sciences*, 2007, vol 5 nr. 3-4, pp29-36.
  26. **Voicu Boșcaiu**, Bratosin D., Dinischiotu A., Postolache C., Sidoroff M., Takacs L., Tcacenco L., Hermenean A., Buruiana V., Ponopal C., Ardelean A., Marinescu, Al. G., *Biomonitorizarea poluării apelor în România - o necesitate de viitor cu dublă importanță*. *Studia Universitatis Vasile Goldis Arad, Seria Științele Vieții*, Vol. 17, nr1, pp.13 – 20, 2007.
  27. **Voicu Boșcaiu**, Sidoroff M, Paun A, Bratosin D, Takacs L, *Utilizarea regresiei logistice multinomiale in toxicologie*. *Romanian Biological Sciences*, 2007, vol. 5 nr. 3-4, pp37-44.
  28. **Voicu Boșcaiu**, Păun A, Rodriguez-Paton, Bratosin D, Sidoroff M, Butu M, *Simularea proceselor subcelulare printr-un (nou) mod discret*. *Romanian Biological Sciences*, 2007, vol 5 nr 3-4, pp9-12.
  29. **Voicu Boșcaiu**, Stancu-Minasian I, Vodă V, *Defining hierarchies for bibliometric entities*. Proc Services and Software Architectures, Infrastructures and Engineering for enhancing EU Citizen’s Quality of Life, May 18,2007, ISBN 978-973-0-04939-8, pp163-170.
  30. **Cornelia Enăchescu, Denis Enăchescu**, *A Multilayer Perceptron Network for the Foetal Weight Prediction*. *Analele Univ. Buc.*, seria inf, XLV, (2007), p.73-84.
  31. **Adrian Carabineanu**, *The Free-Boundary Flow past an Obstacle. Qualitative and Numerical Results*, *Carpathian J. Math.* 23(2007) No. 1-2, p.53-62.
  32. Pelican E., **Popa Constantin.**, *Least squares data shape preserving*, *Carpathian J. Math.*, vol. 23 (1-2) (2007), pp. 165-171.
  33. **Popa Constantin**, Udrescu T. *A fast solver for magnetostatic field problems*, *Romanian Journal of Physics*, vol. 52(3-4)(2007), pp. 237-249.
  34. **M. Rădulescu**, C.Z. Rădulescu, *Optimal decisions for crop planning under risk*. Conference Excellence, Research a way to E.R.A., editors: Nicolae Vasiliu and Lanyi Szabolcs, Brașov, 2007, Editura Tehnică, pag. 28-1 – 28-6. ISSN 1843-5904.
  35. S. Țigan, E. Iacob și **I.M. Stancu-Minasian**, *The robust fractional spanning trees problem with interval data*. *Annals of the „Tiberiu Popoviciu” Itinerant Seminar of functional equations, approximations and convexity*, Cluj-Napoca, Vol. 6, 2006 (nu a fost raportată în 2006).
  36. **Viorel Gh. Vodă** și Al Isaic-Maniu, *Aspects on statistical approach of population homogeneity*. *Journal of Applied Quantitative Methods*, vol. 2, nr. 1, Spring 2007, pp. 142 – 149.
  37. **Viorel Gh. Vodă** și Gheorghe Dinu, *Asupra termenilor indicator și indice CALITATE și MANAGEMENT*. Anul VI, nr. 3/2007, pp. 39 – 43.
  38. **Viorel Gh. Vodă** și Emil Petrescu, *Incertitudinea decizională și riscul statistic (II)*, *CALITATEA (SRAC)*, anul 8, nr. 1 – 2/2007, pp 81 – 88.
  39. **Viorel Gh. Vodă** și Gheorghe Dinu, *Despre informație, entropie și aplicații în managementul calității (I – II – III – IV)*. *CALITATEA (SRAC)*, anul 8, nr. 3 – 4 – 5 – 6/2007, pp. 59 – 61, pp. 60 – 63, pp. 62 – 64, pp. 60 – 64.
  40. **Viorel Gh. Vodă** și Al Isaic-Maniu, *Comentarii asupra calității proceselor de măsurare*. *CALITATEA (ARC)*, anul XV, nr. 1/martie 2007, pp. 13 – 18.
  41. **Viorel Gh. Vodă** și Gheorghe Dinu, *Aspecte ale marketingului produselor intangibile*. *CALITATE și MANAGEMENT*, anul VI, nr. 9/2007, pp. 43 – 48.
  42. **Viorel Gh. Vodă** și Al Isaic-Maniu, *O abordare statistică a poziționării brandurilor*. *MANAGEMENT și MARKETING*, anul II, nr. 2 (6)/2007, pp. 27 -36.

