

## CENTRUL DE CERCETĂRI MATEMATICE AVANSATE FUNDAMENTALE ȘI APLICATIVE

### RAPORT DE CERCETARE

Perioada: 1.01.2011- 31.12.2012

## 1. LUCRĂRI PUBLICATE

### 1.1. Articole publicate în reviste străine cotate ISI

1. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, (2012) *Explaining inefficiency in nonparametric production models: the state of the art*, Annals of Operations Research, DOI: 10.1007/s10479-012-1173-7, ISSN 0254-5330.
2. **Gabriela Beganu**, (2011) *On the existence of the Gauss-Markov estimators in linear mixed models*, Revista Matematica Complutense, 23(1), DOI: 10.1007/s 13163-009-0024-9, ISSN1139-1138.
3. T. Sireteanu, **M. Giuclea**, A. M. Mitu, Gheorghe Ghiță, (2012) *A Genetic Algorithms Method for Fitting the Generalized Bouc-Wen Model to Experimental Asymmetric Hysteretic Loops*, Journal of Vibration and Acoustics, vol. 134, nr. 4, August 2012, pg. 041007-1 - 041007-10, ISSN 0739-3717.
4. Anton Ștefănescu, **Maria Viorica Ștefănescu**, (2012) *On semi-infinite minmax programming with generalized invexity*, Optimization, Vol. 61 Issue: 11, 1307-1319, ISSN 0233-1934.
5. Anton Ștefănescu, Massimiliano Ferrara, **Maria Viorica Ștefănescu**, (2012) *Equilibria of the Games in Choice Form*, Journal of Optimization Theory and Applications, Vol. 155, 3, 1060-1072 DOI: 10.1007/s10957-012-0093-7.
6. **Aida Toma**, Michel Broniatowski, (2011) *Dual divergence estimators and tests: robustness results*, Journal of Multivariate Analysis, 102, 1, 20-36.
7. Michel Broniatowski, **Aida Toma**, Igor Vajda, (2012) *Decomposable pseudodistances and applications in statistical estimation*, Journal of Statistical Planning and Inference, 142, 2574-2585, ISSN 0378-3758

8. Sorin Dăscălescu, Constantin Năstăsescu, **Ana Tudorache**, (2011) *A note on Regular Objects in Grothendieck Categories*, Arabian Journal for Science and Engineering, 36, 6, 2011, pp. 957-962, ISSN 1319-8025.

## 1.2. Articole publicate în reviste românești cotate ISI cu factor de impact

1. **Silvia Dedu**, (2012) *Optimization of some risk measures in stop-loss reinsurance with multiple retention levels*, Mathematical Reports, 14, 2, 131-139, 1582-3067
2. **Silvia Dedu, Cristina Fulga**, (2011) *Value-at-Risk estimation comparative approach with applications to optimization problems*, Economic Computation and Economic Cybernetics Studies and Research, 45, 1, 127-142.
3. **Ciprian Popescu, Cristina Fulga**, (2011) *Possibilistic Optimization with Application to Portfolio Selection*, Proceedings of Romanian Academy - Series A: Mathematics, Physics, Technical Science, Information Science, 12, 2, 88-94.
4. T. Sireteanu, **Marius Giuclea**, O. Solomon, (2011) *Analytical methods to assess linear models for experimental hysteretic loops*, Proceedings of the Romanian Academy, Series A, vol. 12, nr. 1, pg. 39-46, ISSN 1454-9069.
5. **Ciprian Popescu**, (2011) *Mathematical programming for optimal decision making*, Economic Computation and Economic Cybernetics Studies and Research, Vol. 45, No. 3/2011, ISSN 0424-267X, pag. 189-198.
6. **Florentin Serban, Maria Viorica Ștefanescu, Massimiliano Ferrara**, (2011) *Portfolio Optimization and Building of its Efficient Frontier*, Economic Computation and Economic Cybernetics Studies and Research, 2/2011, pp. 125-137, 2011, ISSN: 0424 - 267X
7. Surcel Cristian, Mirvald Cristian, Savu Carmen, **Maria Viorica Ștefanescu**, (2012) *Data Analysis With Application In Medicine*, ECONOMIC COMPUTATION AND ECONOMIC CYBERNETICS STUDIES AND RESEARCH, 46, 2, pp. 79-90.
8. **Aida Toma**, (2012) Robust estimations for financial returns: an approach based on pseudodistance minimization, *Economic Computation and Economic Cybernetic Studies and Research*, 46, 1, 117-131.

## 1.3. Articole publicate în reviste românești cotate ISI fără factor de impact

1. **Virginia Atanasiu**, (2011) *Applications aiming Bühlmann's credibility model*, Revista Scientific Bulletin, Series A, Applied Mathematics and Physics, Vol. 73., Iss. 2, pp. 51-64, ISSN 1223-7027.

#### 1.4. Articole publicate în reviste indexate în baze de date internaționale

1. **Virginia Atanasiu**, (2011) *O aplicație a modelului de recursivitate a credibilității*, Studii și Cercetări de Calcul Economic și Cibernetică Economică, Vol. 45, pg. 47-58, ISSN 0585-7511.
2. **Virginia Atanasiu**, (2011) *Primele de credibilitate dintr-un model ierarhic cu două nivele*, Studii și Cercetări de Calcul Economic și Cibernetică Economică, Vol. 45, pg. 125-138, ISSN 0585-7511.
3. **Virginia Atanasiu**, Gheorghe V. Lepădatu, Dominic Perez Danielescu, (2012) *Estimarea recursivă a credibilității pentru calculul primelor nete de risc ale contractelor diverselor portofolii de asigurări non-viață*, Revista Română de Statistică Nr. 2012 / Trim. I-Supliment, Romanian Statistical Review-, pp. 266-275, ISSN 1018-046x.
4. **Virginia Atanasiu**, Gheorghe V. Lepădatu, Iacob Emanuel Baciu, (2012) *Estimatorii liniari și omogeni de credibilitate din modelul ierarhic al lui Jewell, utile în asigurările non-viață și în contabilitatea actuarială*, Revista Română de Statistică Nr. 2012 / Trim. I-Supliment-, Romanian Statistical Review, pp. 250-259, ISSN 1018-046x.
5. **Virginia Atanasiu**, Gheorghe V. Lepădatu, Iacob Emanuel Baciu, Dominic Perez Danielescu, (2012) *Rezultate din teoria regresiei utile pentru asigurările non-viață și pentru contabilitatea actuarială*, Revista Română de Statistică Nr. 2012 / Trim. I-Supliment-, Romanian Statistical Review, pp. 236-243, ISSN 1018-046x.
6. **Virginia Atanasiu**, Gheorghe V. Lepădatu, Mihaela Daniela Vladu, (2012) *Primele de credibilitate la nivelul sectorului și a contractului pentru modelul ierarhic cu 2 nivele a lui Jewell*, Revista Română de Statistică Nr. 2012 / Trim. I-Supliment-, Romanian Statistical Review-, pp. **205-217**, ISSN 1018-046x
7. **Virginia Atanasiu**, Gheorghe V. Lepădatu, Mihaela Daniela Vladu, (2012) *The Utility of the Credibility Theory*, Revista Română de Statistică Nr. 2012 / Trim. I-Supliment-, Romanian Statistical Review-Supliment, pp. 15-21, ISSN 1018-046x.
8. **Sorin Baz**, (2011) *On a MCMC Procedure for Simulating Entries in a Contingency Table*, Analele Universității București, Informatică, vol LX, 2011, pp.33-45, ISSN 1224-7170
9. **Gabriela Beganu**, (2011) *Optimal estimable parametric functions in a multivariate mixed linear model*, Advances and Applications in Statistics, Vol.21, No. 1, pp. 77-83, 2011, ISSN 0972-3617.
10. **Florentin Șerban, Silvia Dedu**, (2011) *Optimizarea în funcție de risc a unui portofoliu*, Economie Teoretică și Aplicată. Supliment, 694 – 701, 1841-8678
11. **Florentin Șerban, Maria Viorica Ștefănescu, Silvia Dedu**, (2011) *The Relationship Profitability - Risk for an Optimal Portfolio Building with Two Risky Assets and a Risk-Free Asset*, International Journal of Applied Mathematics and Informatics, 5, 4, 299 – 306, 2074-1278
12. **Florentin Șerban, Mihail Bușu, Ana Tudorache**, (2012) *Building an Optimal Portfolio Using Fundamental Analysis of Stocks*, Ovidius University Annals, Economic Sciences Series, XII, 1, 2012, pp. 1672-1677, ISSN 1582-9383
13. A. M. Mitu, T. Sireteanu, **M. Giuclea**, V. Șerban, V. Lascu, (2011) *Experimental and theoretical analysis of novel telescopic devices for earthquake protection*, Revue Roumaine des Sciences Technique, Série Mécanique Appliquée, București, vol. 56, nr. 1, ISSN 0035-4074.

14. M. Nastase, **M. Giuclea**, O. Bold, (2012) *The Impact of Change Management in Organizations – a Survey of Methods and Techniques for a Successful Change*, Revista de Management Comparat International/Review of International Comparative Management, Vol. 13, Issue 1, ISSN 1582-3458.
15. Mihaela Covrig, **Iulian Mircea**, **Ovidiu Vegheș**, **Radu Șerban**, (2011) *Some applications of sums of random variables in non-life insurance*, International Journal of Mathematics and Statistics, 8, S11, 25-34, ISSN 0974-7117 (Print); ISSN 0973-8347 (Online).
16. **Iulian Mircea**, Radu Șerban, Mihaela Covrig, (2012) *On survival and ruin probabilities in a perturbed risk model*, ROMAI Journal, vol 8, nr 2, 2012, pp.153-166, ISSN: 1841-5512
17. **Iulian Mircea**, (2011) *Mathematical Models for the Longevity Risk in the Annuity Market*, Timisoara Journal of Economics, vol. 4, no. 16/2011, p.205-210, ISSN 1842-7340 (Print); ISSN 1844-7139 (Online), ISSN-L: 2248-0927.
18. **Ciprian Popescu**, (2011) *Utilizarea regresiei LQD pentru obținerea unei prognoze robuste privind consumul de oțel în România*, Studii și Cercetări de Calcul Economic și Cibernetică Economică, Nr.1-2/2011, Vol. 45, 109-116, ISSN 0585-7511
19. **Florentin Șerban**, (2011) *Frontiera rentabilitatii unui portofoliu format din 2 actiuni*, Studii si Cercetari de Calcul Economic si Cibenetica Economica, 3-4/2011, pp.59-69, 2011, ISSN: 0585-7511
20. **Florentin Șerban**, Mihail Busu, (2011) *Building an optimal portfolio consisting of two assets and its efficient frontier*, Timisoara Journal of Economics, issue 4(16), pp. 231-238, 2011, ISSN: 1842- 7340
21. **Șerban Florentin**, Busu Mihail, (2011) *A relationship between the degree of search and evolution of a financial asset*, Ovidius University Annals, Economic Sciences Series, XI, 1, 2011, pp. 2052-2056, ISSN 1582-9383
22. **Florentin Șerban**, (2011) *Metode de evaluare a unei actiuni*, Studii si Cercetari de Calcul Economic si Cibenetica Economica, 1-2/2011, pp. 117-125, 2011, ISSN: 0585
23. **Florentin Șerban**, **Maria Viorica Stefanescu**, (2012) *A Portfolio Optimization Approach Based On Data Analysis*, Journal of Communication and Computer, 8, 2, David Publishing, USA, pp. 137-141, 2012, ISSN 1548-7709
24. Dan Armeanu, Sorin Cioaca, **Ana Tudorache**, Ana Maria Burca, (2012) *Financial Crisis Impact on the Development of the Romanian Capital Market*, Internal Auditing and Risk Management, 25, 1, 54-62, ISSN 2065-8168.

## 1.5. Articole publicate în volumele unor conferințe

1. **Virginia Atanasiu**, (2011) *Effective actuarial methods*, Proceedings of the 6th International Conference on Knowledge Management: Projects, Systems and Technologies, Bucharest, 27-28 Octombrie 2011, 39 – 44. ISSN 2069 – 1769.
2. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, *Bias Correction for Nonparametric Conditional Efficiency Estimators*, 14th Applied Stochastic models and Data Analysis, ASMDA 2011 Roma, 101-108, ISBN 97888467-3045-9.
3. **Cristinca Fulga**, **Silvia Dedu**, (2012) *Mean-Risk Portfolio Optimization with Prior PCA Stock Selection*, Proceedings of the International Workshop Stochastic Programming for Implementation and Advanced Applications STOPROG 2012, Eds. Leonidas Sakalaukas,

- Asgeir Tomasgard, Stein W. Wallace, ISBN: 978-609-95241-4-6, Publ. The Association of Lithuanian Serials Vilnius: Technika, DOI: 10.5200/stoprog.2012.07, 37-42.
4. **Florentin Șerban, Maria Viorica Ștefănescu, Silvia Dedu**, (2011) *Building a portfolio that characterize Bucharest Stock Exchange*, Crises after the crisis. Inquiries from a national, European and global perspective IECS 2011, ISBN: 978-606-12-0139-6, The 18th International conference Crises after the crisis. Inquiries from a national, european and global perspective IECS 2011
  5. **Florentin Șerban, Maria Viorica Ștefănescu, Silvia Dedu**, (2011) *The Efficient Frontier for a Portfolio that Includes One Risk-Free Asset*, Recent Researches in Applied Mathematics, Simulation and Modelling, pp. 91-95, ISSN 1792-4332, ISBN 978-1-61804-016-9, The 5th WSEAS International Conference on Applied Mathematics, Simulation, Modelling ASM '11
  6. **Florentin Șerban, Maria Viorica Ștefănescu, Silvia Dedu**, (2011) *Building an optimal portfolio using a Mean-VaR framework*, Mathematical Methods and Techniques in Engineering and Environmental Science, ISBN 978-1-61804-046-6, The 13th International Conference on Mathematical and Computational Methods in Science and Engineering.
  7. **Florentin Șerban, Maria Viorica Ștefănescu, Silvia Dedu**, (2012) *Algorithm in three stages for portfolio optimization - Application in case of Italian Stock market*, Proceedings of The 19th International Economic Conference – IECS 2012, ISBN 978-606-12-0323-9, The 19th International Economic Conference – IECS 2012
  8. **Cristinca Fulga, Silvia Dedu**, (2012) *Mean-Risk portfolio optimization with prior PCA-based stock selection*, Stochastic Programming for Implementation and Advanced Applications, ISBN 978-609-95241-4-6, The International Workshop Stochastic Programming for Implementation and Advanced Applications.
  9. **Maria Tudor, Silvia Dedu**, (2012) *A new risk management model using quantile-based risk measure, with applications to non-normal distributions*, Recent Researches in Applied Information Science, ISBN 978-1-61804-089-3, The 5th World Congress on Applied Computing Conference.
  10. **Cristinca Fulga**, (2011) *Mean-Risk Portfolio Optimization with AHP-based Stock Ranking*, Proceedings of the International Symposium on the Analitic Hierarchy Process ISAHP 2011, pp. 60-62, Editors: F. De Felice, E. Esposito, A. Petrillo, T.L. Saaty, Sorrento, Italy, June 15-18, 2011, ISSN: 1556-8296, ISBN: 978-88-906 147-0-5.
  11. **Daniela Ijacu**, (2012) *A differential game with stochastic perturbation associated with non adapted solutions*, Proceeding of 6 -th global conference on power, control and optimization – ISBN 978-983-4483-49
  12. **Iulian Mircea**, (2011) *Mathematical Models for the Longevity Risk in the Annuity Market*, 18th International Economic Conference – IECS 2011, „Lucian Blaga” University of Sibiu, The Faculty of Economic Sciences, MAY 19-20, Sibiu, în volumul conferinței ISBN 978-606-12-0139-6
  13. **Iulian Mircea**, (2011) *Mathematical models for the impact of dynamics of mortality on the annuity prize*, Proceedings of The Sixth International Conference on Economic Cybernetic Analysis, MAY 20-21, 2011, Bucharest, Editura ASE, p.261-270, ISSN: 2247-1820, ISSN-L: 2247-1820.
  14. **Iulian Mircea**, (2011) *The survival probability in a risk model with dependence between premium rates and claim sizes*, Proceedings of The Sixth International Conference on

- Economic Cybernetic Analysis, MAY 20-21, Bucharest, Editura ASE, p.252-260, ISSN: 2247-1820, ISSN-L: 2247-1820
15. **Iulian Mircea**, Mihaela Covrig, (2011) *On the Longevity Risk in the Annuity Market: Some Mathematical Models*, International Symposium on Applied Economics, Business and Development (ISAEBD 2011), Dalian, China, August 6-7, 2011, Proceedings, Part IV, pag. 168-175, ISSN 1865-0929, e-ISSN 1865-0937 ISBN 978-3-642-23061-5, e-ISBN 978-3-642-23062-2 DOI 10.1007/978-3-642-23062-2
  16. **Iulian Mircea**, Radu Șerban, Mihaela Covrig, (2012) *On survival and ruin probabilities in a perturbed risk model*, The 20<sup>th</sup> Conference on Applied and Industrial Mathematics – CAIM XX, Chișinău, August 22-25, Communications: p.163, ISBN 978-9975-76-090-4.
  17. **Iulian Mircea**, Mihaela Covrig, (2012) *On Longevity Risk Models in the Romanian Annuity Market and Pension Funds*, International Conference Applied Statistics 2012, Program and abstracts, p.10, 58, ISBN 978-961-92487-8-2, ISBN 978-961-92487-9-9
  18. Radu Șerban, Covrig Mihaela, **Iulian Mircea**, (2012) *The algorithm of the tangent hiperbola for one dimensional optimization numerical results*, Proceedings of The Seventh International Conference on Economic Cybernetic Analysis: "THE NEW ECONOMIC CRISIS: EVOLUTION AND RECOVERING WAYS-NEC2012", OCTOBER 26-27, Bucharest, Editura ASE, p.87-92, ISSN: 2247-1820, ISSN-L: 2247-1820.
  19. **Iulian Mircea**, Mihaela Covrig, Șerban Radu, (2012) *The ruin probabilities at discrete-time insurance models*, Proceedings of The Seventh International Conference on Economic Cybernetic Analysis: "THE NEW ECONOMIC CRISIS: EVOLUTION AND RECOVERING WAYS-NEC2012", OCTOBER 26-27, Bucharest, Editura ASE, p.134-142, ISSN: 2247-1820, ISSN-L: 2247-1820.
  20. Andreea Iluzia Iacob, **Ciprian Popescu**, (2011) *Regression using partially linearized gaussian fuzzy data*, Informatics Engineering and Information Science (Part II) (Eds.: Azizah Abd Manaf, Akram Zeki, Mazdak Zamani, Suriayati Chuprat, Eyas El-Qawasmeh), Communications in Computer and Information Science 252, Springer-Verlag Berlin Heidelberg, ISSN 1865-0929, ISBN 978-3-642-25452-9, pag. 584-595.
  21. Andreea Iluzia Iacob, **Ciprian Popescu**, (2011) *Application of mathematical programming on the Romanian agro-food economy: cereal price analysis*, 18th International Economic Conference (IECS 2011) "Crises After the Crisis. Inquiries from a National, European and Global Perspective", "Lucian Blaga" University of Sibiu, Faculty of Economic Sciences, Sibiu, Romania, May 19-20, 2011, volumul conferinței a apărut în format ISBN 978-606-12-0139-6, pag. 181-186.
  22. **Cristina Pripoae**, (2011) *A non-holonomic economic model for the "Libyan 2011" oil crisis*, Supl.al Revistei "Acces la Calitate", an 12, nr.121,ISSN 1582-2559, Scientific Workshop "The Economic and Ecological Dimension of Development in the third Millenium",3-th ed.,2011, April 11-th, Bucharest.
  23. **Aida Toma**, Michel Broniatowski, (2011) *Estimation criteria based on pseudodistance minimization*, Proceedings ASMDA 2011, 1348-1355, ISBN 97888467-3045-9.

## 2. CĂRȚI PUBLICATE

### 2.1. Cărți publicate în străinătate

### 2.2. Cărți publicate în țară

1. **Virginia Atanasiu**, (2011) *Algebră Liniară. Teorie și Aplicații*, Editura Printech, pg. 429, ISBN 978-606-521-652-5.
2. **Virginia Atanasiu**, (2011) *Analiză Matematică. Ecuații Diferențiale. Lanțuri Markov. Teorie și Aplicații. Volumul I*, Editura Printech, București, pg. 409, ISBN 978-606-521-685-3.
3. **Virginia Atanasiu**, (2011) *Analiză Matematică. Ecuații Diferențiale. Lanțuri Markov. Teorie și Aplicații. Volumul II*, Editura Printech, București, pg. 335, ISBN 978-606-521-685-3.
4. **Cristinca Fulga, Silvia Dedu, Ciprian Popescu**, (2011) *Managementul Riscului. Aplicații în Optimizarea Portofoliilor*, Editura ASE, București, ISBN 978-606-505-473-8.
5. **Cristinca Fulga, Silvia Dedu, Ciprian Popescu**, (2011) *Managementul riscului. Aplicații în optimizarea portofoliilor*, Editura ASE.
6. **G. Beganu, M. Giuclea**, (2011) *Elemente fundamentale de matematică aplicată în economie* Editura ASE, ISBN 978-606-505-398-4.
7. **Tudor Maria, Sibiceanu Mariana, Iftimie Bogdan, Mircea Iulian**, (2011) *Capitole speciale de procese stocastice, cu aplicații*, Editura ASE, București, 2011, 455 pg., ISBN 978-606-505-395-3
8. **Ion Purcaru**, (2011) *Introducere în Măsurarea Diversității. Teorie și Aplicații*. Editura Economică București, 390 pag., ISBN: 973-709-548-0
9. **Ion Purcaru**, (2011) *Matematici Generale și Elemente de Optimizare*. Editura Economică București, București, 840 pg., ISBN 973-590-837-9. (Ediția a III-a).
10. **Marin Toma, Mihail Busu, Florentin Șerban** (2009) *Matematici aplicate în economie. Teorie și aplicații*, Editura Teocora, nr pagini 175, ISBN :978-973-8832-6-5

### 2.3. Capitole în volume colective

1. **Luiza Bădin**, Cinzia Daraio, (2011), *Explaining Efficiency in Nonparametric Frontier Models: Recent developments in statistical inference*, in Exploring research frontiers in contemporary statistics and econometrics, Eds. I. Van Keilegom and P.W. Wilson, Springer-Verlag Berlin Heidelberg, 151-175, DOI 10.1007/978-3-7908-2349-3\_7
2. **Bogdan Iftimie, Marinela Marinescu, C. Vârsan**, (2011) *Functionals associated with gradient stochastic flows and nonlinear SPDEs*, în volumul Advanced Mathematical Methods for Finance (volum special dedicat contractului internațional cu același nume al European Science Foundation ESF derulat în perioada 2005 -2010), Capitolul 15, 19 pagini, Springer-Verlag Berlin Heidelberg.

3. Mihaela Covrig, **Iulian Mircea**, (2011) *On some approximations used in the risk process of an insurance company*, Annual Book of Sofia University "St. Kliment Ohridski", Faculty of Economics and Business Administration, Vol.9, 2011, pp.131-138, ISSN: 1311-8420.
4. Mihaela Covrig, **Iulian Mircea**, **Ovidiu Vegheș**, **Radu Șerban**, Constantin Raischi, (2011) *Some applications of sums of random variable in non-life insurance*, Annual Book of Sofia University "St. Kliment Ohridski", Faculty of Economics and Business Administration, (Annuaire De L'Université De Sofia "St. Kliment Ohridski", Faculté Des Sciences Economiques Et De Gestion), Vol.9, pp.139-151, ISSN: 1311-8420.

### 3. COMUNICĂRI ȘTIINȚIFICE

#### 3.1. Comunicări la conferințe internaționale

1. **Virginia Atanasiu**, *Credibility formulas of the model incorporating risk volume*, Simpozionului Internațional „Statistically Significant Evolution Of Services Development”, București, România, 23-25, 2012.
2. Anamaria Aldea, **Luiza Bădin**, Carmen Lipară, *Efficiency Analysis of Commercial Banks Using a Nonparametric Unconditional Quantile Approach*, 9th International Conference on Data Envelopment Analysis (DEA2011), 24-27 August 2011, Salonic, Grecia.
3. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, *How to Measure the Impact of Environmental Factors in a Nonparametric Production Model?*, XII European Workshop on Efficiency and Productivity Analysis (EWEPA XII), 21-24 Iunie 2011, Verona, Italia.
4. Anamaria Aldea, **Luiza Bădin**, Carmen Lipară, *Efficiency Analysis of Commercial Banks: A Robust Nonparametric Approach*, XII European Workshop on Efficiency and Productivity Analysis (EWEPA XII), 21-24 Iunie 2011, Verona, Italia.
5. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, *Addressing the Bias Correction Issue in Nonparametric Frontier Models*, V Ith North American Productivity Workshop (NAPW VII), 6-9 Iunie 2012, Houston, Texas.
6. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, *Explaining Inefficiency in Nonparametric Production Models: the State of the Art*, V Ith North American Productivity Workshop (NAPW VII), 6-9 Iunie 2012, Houston, Texas.
7. Anamaria Aldea, **Luiza Bădin**, Carmen Lipară, *Assessing the Impact of Stock Volatility on the Efficiency of Listed Commercial Banks: A Conditional Nonparametric Approach*, 25th European Conference on Operational Research, EURO XXV, 8-11 Iulie, 2012, Vilnius, Lituania.
8. **Cristinca Fulga**, *Single Period Mean-risk Portfolio Rebalancing Model with a Hybrid Approach of the Stock Selection Phase*, The 19th Triennial Conference of the International Federation of Operational Research Societies IFORS2011, Melbourne, Australia, July 10-15, 2011.
9. **Cristinca Fulga**, *Multi-Period Portfolio Optimization*, The 14th Conference of the Applied Stochastic Models and Data Analysis International Society ASMDA 2011, Rome, Italy, June 7-10, 2011.
10. **Cristinca Fulga**, *Risk-Return Portfolio Optimization*, The International Conference on Operations Research OR 2011, Zurich, Switzerland, August 30 - September 2, 2011.



11. **Cristinca Fulga**, *Multi-Agent Systems Modeling and Management Based on a Decentralized/Cooperative Optimization Technique*, The 10th IEEE/WIC/ACM International Conference on Intelligent Agent Technology, Lyon, France, August 22-27, 2011.
12. **Cristinca Fulga**, *Optimal Portfolio Selection With Disutility Based Risk Measure*, The 25th IFIP TC 7 on System Modeling and Optimization Conference, Berlin, Germany, September 12-16, 2011.
13. **Cristinca Fulga**, *Portfolio Optimization with a New Quantile-based Risk Measure*, The 25th European Conference on Operational Research, Vilnius, Lithuania, July 8-11, 2012.
14. **Cristinca Fulga**, *Portfolio Optimization with prior AHP Stock Ranking*, The 21st International Symposium on Mathematical Programming, Berlin, Germany, August 19-24, 2012.
15. **Bogdan Iftimie**, *A portfolio optimization problem in a financial market with stochastic interest rate*, Workshop Probability and Related Aspects, Alba Iulia, România, 22-26 mai 2012.
16. **Bogdan Iftimie**, *Portfolio optimization in an incomplete market with stochastic interest rate*, International Conference on Applied and Computational Mathematics ICACM, Middle East Technical University (METU), Ankara, Turcia, 3-6 octombrie 2012.
17. **Daniela Ijacu, Marinela Marinescu**, *Reversible stochastic flows associated with nonlinear SPDE*, EQUADIFF 2011, 01.08-05.08, Loughborough University, Loughborough, UK.
18. **Marinela Marinescu, Daniela Ijacu**, *Tree problems for stochastic flows associated with nonlinear SPDEs and backward parabolic equations with parameters*, 6th International Conference on Stochastic Analysis and Its Applications, 10.09-14.09, 2012, The Mathematical Research and Conference Center, Bedlewo, Polonia
19. **Marinela Marinescu**, *Analysis of stochastic differential equations with jumps*, The Seventh Congress of Romanian Mathematician, 29.06-05 .07, 2011, Universitatea Transilvania, Braşov.
20. Mircea Nica, **Marinela Marinescu**, *Stochastic flows with unbounded jumps associated with nonlinear SPDEs*, 7th Bachelier Finance Society World Congress, 19.06-22.06,2012, Sydney, Australia.
21. **Iulian Mircea**, Mihaela Covrig, *Mathematical Models in the Romanian Annuity Market and Pension Funds*, The 6th International Conference on Computational and Financial Econometrics (CFE 2012) and 5<sup>th</sup> International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computing & Statistics (ERCIM 2012), Oviedo, Spain, 1-3 December 2012.
22. **Cristina Pripoae**, Gabriel Pripoae, Vasile Preda, *Eta-pseudolinearity on differentiable manifolds*, The VI-th International Conference of Differential Geometry and Dynamical Systems (DGDS-2012), August 29- September 2, Mangalia.
23. **Mariana Sibiceanu**, *Asymptotic exponential inequalities for empirical measures constructed on terms far apart in a mixing sequence*, 8 th World Congress in Probability and Statistics Istanbul, 9 -14 July, 2012.
24. Ferrara Massimiliano, **Şerban Florentin, Ştefanescu Maria Viorica**, (2011) *A new portfolio management approach based on principal component analysis and clustering techniques*, The 14 th Conference of the ASMDA International Society, Universitatea La Sapienza, Roma, 7-10 iunie 2011.

25. **Florentin Șerban**, (2011) *Risk control and how it can be anticipated economic evolution*, a 6-a Conferința Internațională de Cibernetică Economică "Global crisis effects and the patterns of economic recovery (GCER-2011)
26. **Șerban Florentin, Ștefanescu Maria Viorica**, Busu Mihail, (2012) *Portfolio optimization algorithm based on data analysis and mean-risk models*, The 20th International Conference on Computational Statistics COMPSTAT 2012, Limassol, Cipru, 27 - 31 august 2012
27. **Aida Toma**, *Estimation Criteria Based on Pseudodistance Minimization*, 14<sup>th</sup> Applied Stochastic Models and Data Analysis Conference – ASMDA 2011, Rome, Italy, 6-10 June 2011, (**Invited Speaker** at the special session “*Building models and handling statistical inference*”, organized by prof. Vladimir Zaiats)
28. **Aida Toma**, *Robust estimation for financial returns: an approach based on pseudodistance minimization*, The Seventh Congress of Romanian Mathematicians, Brașov, Romania, 29 June – 5 July 2011.
29. **Aida Toma**, *Robust and efficient estimation methods for asset returns*, "The Economic Scientific Research, Support to Welfare and Human development in European Context - Post Doctoral School"-Socio Economic Approach: Multi-Scale Integrated Analysis and Macroeconomic Modeling, Bucharest, 22-23 November 2011.

### 3.2. Comunicări la conferințe naționale

1. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, *Assessing the Impact of Environmental Factors in a Nonparametric Production Model*, A 14-a Conferință a Societății de Probabilități și Statistică din România, 28 Aprilie 2011, București, România
2. **Luiza Bădin**, Cinzia Daraio, Leopold Simar, *Explaining Inefficiency in Conditional Nonparametric Frontier Models*, A 15-a Conferință a Societății de Probabilități și Statistică din România, 27 Aprilie 2012, București, România.
3. **Gabriela Beganu**, *On the existence of the best quadratic unbiased estimators of covariance components in linear models with multivariate random effects*, A 14-a Conferința a Societății de Probabilități și Statistică din România, 2011.
4. **Bogdan Iftimie**, *Aplicații ale teoriei controlului optimal stohastic în rezolvarea problemelor de optimizare pentru problemele de tipul investitor-manager în timp continuu*, Workshop for Young Researchers in Mathematics, Constanța, România, 12-13 mai 2011.
5. **Bogdan Iftimie**, *A portfolio optimization problem with a stochastic interest rate*, Workshop for Young Researchers in Mathematics, Constanța, România, 10-11 mai 2012.
6. **Marinela Marinescu, Daniela Ijacu**, *About stochastic differential games with Nash equilibrium solutions*, A 15-a Conferință a Societății de Probabilități și Statistică din România, 27.04-28.04, 2012, Facultatea de Matematica și Informatica Universitatea București.
7. **Marinela Marinescu**, *A nonlinear filtering problem involving non-smooth functionals*, 14-a Conferință a Societății de Statistică și Probabilități, 29 Aprilie 2011, Academia de Studii Economice, București.
8. **Marinela Marinescu**, *Implication of the Kolmogorov equation in solving an european option problem*, Workshop for Young Researchers in Mathematics, 12-13 Mai, 2011, Universitatea Ovidius, Constanța.

9. **Liana Manu Iosifescu**, *A singular random system with complete connections*, 14<sup>th</sup> National Conference of the Society for Probability and Statistics from Romania, Bucharest, 29 April 2011.
10. **Cristina Pripoae**, *Rezultate recente privind convexitatea funcțiilor pe varietati diferentiale*, A 14-a Conferința a Societății de Probabilități și Statistică din România, 29 aprilie, 2011.
11. **Mariana Sibiceanu**, *Asymptotic exponential inequalities for empirical measures corresponding to distanced terms of a mixing sequence*, A 15-a Conferință a Societății de Probabilități și Statistică din România, București, 27 Aprilie, 2012.
12. **Aida Toma**, *Decomposable pseudodistances and applications in continuous families*, A 14 a Conferință Națională a Societății de Probabilități și Statistică din România, București, 29 Aprilie 2011.
13. **Aida Toma**, Samuela Leoni-Aubin, *Minimum pseudodistance estimators of multivariate location and scatter and applications*, A 15 a Conferință Națională a Societății de Probabilități și Statistică din România, București, 27 Aprilie 2012.
14. **Ovidiu Vegheș**, *Asupra soluțiilor jocurilor cooperative*, A 14-a Conferință a Societății de Probabilități și Statistică din România, 29 Aprilie 2011.
15. **Ovidiu Vegheș**, *Continuity properties of a solution in cooperative games*, A 15-a Conferință a Societății de Probabilități și Statistică din România, Aprilie 2012.

### 3.3. Seminarii științifice susținute

1. **Florentin Șerban**, *Fundamentarea conceptuală și metodologică a optimizării unui portofoliu de acțiuni Aplicație în cazul acțiunilor listate la Bursa de Valori București*, Seminarul științific al grupului Uniunea Economică și Monetară, susținut în ianuarie 2011, în cadrul proiectului POSDRU/89/1.5/S/59184.
2. **Mariana Sibiceanu**, *Deviații mari*, Seminar științific susținut în cadrul CCMAFA al Departamentului de Matematici Aplicate, ASE, București, 29.11.2012.