



Czech Society for Operations Research
Czech Econometric Society
Faculty of Informatics and Management University of Hradec Králové

Conference Programme

23rd International Conference Mathematical Methods in Economics 2005
14 – 16 September 2005, Hradec Králové, Czech Republic

Wednesday 14.9.2005

08.00 – 10.00 Registration

10.00 – 10.30 **Opening Session – Room A5; Chair Jana Hančlová**

Jaroslava Mikulecká – Rector of the University of Hradec Králové
Otakar Divíšek – Lord Mayor of City Hradec Králové
Oldřich Vlasák – Member of the European Parliament

10.30 – 12.00 **Plenary Session A – Room A5; Chair Petr Fiala**

Moshe Sniedovich (University of Melbourne, Australia): **Live OR, IFORS tutORial Project**
Luka Neralic (University of Zagreb, Croatia): **On Regular and Parametric Data Envelopment Analysis**

12.00 – 13.30 Lunch

13.30 – 15.10 **Parallel Sessions: W1 (Room A5), W2 (Room A1), W3 (Room A2), W4 (Room A17)**

15.10 – 15.30 Coffee Break

15.30 – 16.50 **Parallel Sessions: W5 (Room A5) , W6 (Room A1), W7(Room A2), W8 (Room A17)**

17.00 – 18.00 **Plenary Session B (Room A5); Chair Jan Pelikán**

Alexis Tsoukias, President of EURO: EURO and OR in Europe

18.00 – 19.00 **General Meeting of the Czech Society for Operations Research (Room A5)**

19.00 – 22.00 **Conference Dinner**

Wednesday 14.9.2005

13.30 – 15.10 **Parallel Sessions (25 min): W1 (Room A5), W2 (Room A1), W3 (Room A2), W4 (Room A17)**

W1 Decision Making I Chair: Janes Žerovnik	A5	W2 Econometrics/Modelling Chair: Osvald Vašíček	A1	W3 Finance/Stochastic Modelling I Chair: Roy Cergueti	A2	W4 Stochastic modelling I Chair: Jaroslav Ramík	A17
Core Equivalence for Economy on Belief Takashi Matsuhisa		Stability and Lyapunov Exponents in Keynesian and Classical Macroeconomic Models Jan Kodera, Karel Sladký, Miloslav Vošvrda		Stochastic Dominance and CVaR in Portfolio Selection Problem Miloš Kopa		Uncertainties in Stochastic Programming Jitka Dupačová	
Power Indices in Voting by Count and Account Midori Hirokawa, Milan Vlach		Some Problems of VAR Models of the Monetary Transmission Mechanism Roman Hušek		Long Memory in Volatility or Parameter Inconstancy? The Case of Prague Stock Exchange Alexandr Kuchynka		On Stability of Stochastic Programming Problems with Linear Recourse Vlasta Kaňková	
Equity and Efficiency in a Measure Space with Nonadditive Preferences: The Problem of Cake Division Nobusumi Sagara, Milan Vlach		Modeling of Combinatorial Auctions in Network Economy Petr Fiala, Lenka Flusserová		Forecasting in Continuous Double Auction Martin Šmíd		Mean Variance Optimality in Markov Decision Chains Karel Sladký, Milan Sitař	
A Comprehensive Numerical Algorithm for Solving Servis Points Location Problems Assem Tharwat, M. Saleh		Modeling of Interacting Agents in Network Economy Petr Fiala, Václav Kořenář		Approach to Real Option Model Application on Soft Binomial Basis. Fuzzy - Stochastic Approach Zdeněk Zmeškal		Estimation and Estimator Consistency Petr Lachout	

15.30 – 16.50 **Parallel Sessions (20 min): W5 (Room A5) , W6 (Room A1), W7(Room A2), W8 (Room A17)**

W5 Multicriteria Decisions Chair: Milan Vlach	A5	W6 Econometrics II Chair: Miloslav Vošvrda	A1	W7 Finance/Stochastic Modelling II Chair: Zdeněk Zmeškal	A2	W8 Stochastic modelling II Chair: Jitka Dupačová	A17
Estimating Priorities in AHP with Interval Pair-Wise Judgements Dimitris K. Despotis, Dimitris Derpanis		Analyzing the Path of Slovakia towards Monetary Union by Means of a Multi-Equation Gap Model Michal Benčík		Nonparametric Cointegration Analysis for Multivariate I(2) processes and Application in Finance Roy Cerqueti		Optimal Range for the iid Test Based on Integration across the Correlation Integral Evžen Kočenda, Ľuboš Briatka	
A MS Excel Based Support System for Data Envelopment Analysis Models Josef Jablonský		Microeconomic Analysis of Equilibrium in Network Industries in Context of Influence of Regulated Prices Eleonora Fendeková, Michal Fendek		Analysis of Style Investing and Evaluating Style Analysis of the Mutual Funds Zdenka Milánová		An Aggregated Semi-Markov Decision Model for Traffic Control with Lane Restriction Ondrej Bartl	
Scheduling Serial - Parallel Processors – A Case Study Jan Pelikán		Modelling the Equilibrium on External Market Case of Slovakia Jaroslav Husár		Alternative Portfolio Selection Models Vladimír Mlynarovič		Tree Approach to the Time Bounded Transportation Problem Petr Kučera	
Metaheuristics in Automated Storage and Retrieval Systems Blaž Zmazek, Janez Žerovnik		Sparse Parameter Estimation in Economic Time Series Models Jaromír Tonner		Applications of Gini's Mean Difference to Portfolio Analysis Agata Gluzicka, Donata Kopańska – Bródka		Moment Problem and Worst-Case Value-at-Risk Jana Čerbáková	

Thursday 15.9.2005

08.30 – 10.10 **Parallel Sessions (20 min): T1 (Room A5), T2 (Room A1), T3 (Room A2)**

T1 Optimization Chair: Karel Sladký	A5	T2 Econometrics III Chair: Roman Hušek	A1	T3 Applied Stochastic Models I Chair: Jaroslav Husár	A2
Duality in Fuzzy Multiple Objective Linear Programming with Possibility and Necessity Relations Jaroslav Ramík		Are Reduced Forms of Dornbusch Monetary Model Really Reduced? Eva Rublíková		Fuzzy Time Series Modelling by SCL Learning Dušan Marček, Milan Marček	
Press Distribution Process with a Down-Up-Down Strategy José M. Caridad y Ocerin, Francisco J. R. Aragón		Time Consistent Monetary Policy in Slovak Economy Karol Szomolányi		Analysis of Change Point in Cox Regression Model with Application to Unemployment Data Soňa Reiserová	
An Application of Quasi-Hierarchy Approach to Decision Making Under Uncertainty Cezary Dominiak		Application of the Bootstrap Filter Method on a Small Economy Model Hana Pytelová, Osvald Vašíček		Bayes Analysis of Time Series with Covariates Petr Volf	
Split Delivery Problem Jan Pelikán, Jan Fábry, Václav Kořenář		Differential Equations in Health Insurance Disability Risk Models František Peller, Lea Škrovánková		Quantile Regression: An Application to the Wages in the Czech Republic Jana Kalčevová	
Efficiency of Data Envelopment Analysis for Efficiency Evaluation in the Health Services Martin Dlouhý, Lenka Flusserová		Exchange Rate and Monetary Policy in Slovak Economy Ivaničová Zlatica, Chocholatá Michaela		An application of a generalized multiple linear regression model Ivan Kavkler, Alenka Kavkler	

10.10 – 10.40 Coffee Break

10.40 – 12.00 **Parallel Sessions (20 min): T4 (Room A5), T5 (Room A1), T6 (Room A2), T7 (Room A17)**

T4 Decision making II Chair: Josef Jablonský	A5	T5 Econometrics IV Chair: František Peller	A1	T6 Applied Stochastic Models II Chair: Petr Lachout	A2	T7 Operations Research I Chair: Karel Zimmermann	A17
Credit Scoring Methodologies Martin Vojtek, Evžen Kočenda		A Model Interpretation of the Czech Inflation Targeting and the Monetary Policy Osvald Vašíček, Karel Musil		Estimating Technical Efficiency of Human Capital Production in the Italian University with Correction for Student Characteristics. Guido Ferrari, Tiziana Laureti		The Knowledge Granules of Multicriteria European Countries Classification Problem Iwona Gruszka	
Sensitivity Analysis in Piecewise Linear Programming Models Milan Houška, Martina Beránková		Stochastic Dominance in the Choice of Optimal Ratios of the Non-Life Insurance Premiums Bogdan Ciupek		Czech Machinery in the Light of Tobins'Q Václava Pánková		The Stable Activities Problem and the Stable Multiple Activities Problem Viera Borbelová	
Farkas' Lemma and Linear Programming in Linearly Ordered Vector spaces David Bartl		Basic Ways of Monte Carlo Simulation to Efficient Pricing of European Options Tomáš Tichý		Properties of the S-shape Value Function and its Applications Renata Dudzińska, Donata Kopańska-Bródka		The Use of Interactive Methods in Multiple Criteria Resource Scheduling Problem Tomáš Šubrt	
Fuzzy Probability Spaces in Decision-Marking under Risk Jana Talašová, Ondřej Pavlačka		Multiple Relations of Composite Commodities Jiří Frank, Martin Gavalec		Estimation of Binary Choice Model with Panel Data Zuzana Fígllová		Commercial Spots Booking Brožová Helena	

13.00 – Conference Trip (Rychnov nad Kneznou - Castle)

Friday 16.9.2005

08.30 – 10.10 **Parallel Sessions (20 min): F1 (Room A5), F2 (Room A1), F3 (Room A2)**

F1 Decision Making III Chair: Dušan Marček	A5	F2 Econometrics V Chair: Bohdan Ciupek	A1	F3 Stochastic Modelling III Chair: Václava Pánková	A2
Real Options Analysis and Game Theory Application in Investment Process Miroslav Čulík		Methodology of Creation a Social Accounting Matrix in Slovakia Veronika Miřková		Extremes of Stochastic Processes Jana Husová	
Solving Some Types of Location Problems Karel Zimmermann		The quantitative analysis of Ostrava region water supply development Lubomír Müller		Copulas - Risk Measures of Association Karel Vaníček	
Portmanteau Tests Based on Kendall's Autocorrelation Coefficients Miroslav Šiman		Some Notes to Black-Scholes Equation Ladislav Lukáš		Estimation in Chance-Constrained Problem Michal Houda	
A Comparison of Two Parametric ROC Curves Estimators in Binormal Model Jaroslav Michálek, Marek Sedlačik, Lucie Doudová		Money's Function in the Czech Monetary Business Cycle Stanislav David, Osvald Vašiček		Modification of the EOQ Model for the Annual Constant Demand Situation and the Possibility of its Usage in a Supply Chain Martina Kuncová	
Comparison the Quality of Classification Algorithms Hana Skalská		On an Optimal Advertising Model with Lagged Effect of Advertising Pavel Pražák		Tests of Heteroskedasticity and Eventual Conflicts among Them Dalibor Moravanský, Daniel Němec	

10.10 – 10.40 Coffee Break

10.40 – 11.40 **Parallel Sessions (20 min): F4 (Room A5), F6 (Room A1)**

F4 Decision Making IV Chair: Rublíková Eva	A5	F6 Operations Research II Chair: Jana Talašová	A1
New Criteria for Stochastic DEA Petr Chovanec		An Efficient Procedure for 0-1 IP Problem Otakar Machač and Simona Böhmova	
Securing of Business Information Jaroslav Mlýnek		Necessary conditions for Condorcet winner configurations in facility location Games Jana Hajduková	
The Economics of Spam Ladislav Beránek		Multifactoral Analysis of the Trafic Potential of the Region Marie Müllerová , Lubomír Müller	

11.50 – 12.15 **Closing Session – Room A5**