**Matej Bel University, Faculty of Economics, Department of Applied Informatics,**

**Banská Bystrica, Slovakia**

**The University of Economics, Faculty of Informatics and Statistics, Department of Statistics and Probability, Prague, Czech Republic**

**Wroclaw University of Economics, Department of Statistics and Economic Cybernetics, Wroclaw, Poland**

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**15th International Scientific Conference**

applications of Mathematics and Statistics in Economy

CONFERENCE PROGRAMME

### **August 30 – September 1, 2012**

## **Liberec**

**CZECH REPUBLIC**

**Wednesday 29 Aug**

17,00 – 19,00 *Registration*

19,00 – 21,00 *Welcome Party*

**Thursday 30 Aug**

8,00 – 9,00 *Breakfast*

9,00 – 10,15 *Plenary Session* (Conference Room) *Chair: R. Hindls*

* Opening Ceremony (**R. Hindls, W. Ostasiewicz, R. Zimka**)
* Keynote Speech
  + **A. Dekrét, R. Zimka**: Is it possible to secure intergenerational equity in an economy with exhaustible resources?

10,15 – 10,45 *Coffee Break*

11,15 – 12,30 *Parallel Sessions*

* Cluster Analysis (Conference Room) *Chair: S. Heilpern*
  + **H. Řezanková**: Discussion about Two Coefficients for Determining the Number of Clusters
  + **V. Vintrová, T. Vintr**: Partition Clustering Using a Function of Local Densities as Weights
  + **L. Pastorek:** Clustering Algorithms Applied to Artificial Datasets with Different Size of Dimension
  + **M**. **Stachová, L. Sobíšek**: Bayesian Clustering Methods Modelling Real Data
* Wages and Employment (Small Room) *Chair: E. Zimková*
  + **A. Čabla**: Unemployment Duration in the Czech Republic
  + **A. Kaščáková, G. Nedelová, M. Považanová**: Determinants of the Unpaid Work in Slovakia
  + **Ž. Rusnak**: The Determinants of Poverty
  + **Š. Šustová, M. Zelený**: At work…, and poor? A look at the Czech low wages households in the Living Conditions (SILC) Survey
  + **K. Duspivová, K. Vltavská, M. Matějka**: The Role of the Minimum Wages in the Czech Republic: Pros and Cons of Widely Used Measures

12,30 – 14,00 *Lunch*

14,00 – 15,30 *Parallel Sessions*

* Microeconomic Issues (Conference Room) *Chair: R. Zimka*
  + **M. Boďa, M. Kanderová**: Applying the Concept of Economic Capital in Non-Financial Firms
  + **D. Králová**: The Distribution of Stocks Based on Cluster Analysis
  + **V. Hiadlovský, P. Kráľ**: Utilisation of Probabilistic Graphical Models in the Financial Health Prediction of the Slovak Companies
  + **P. Kráľ, V. Roháčová:** Measuring the Efficiency of Public Road Transport Companies in the Slovak Republic – A Bayesian Combination of DEA and SFA
* Macroeconomic Issues (Small Room) *Chair: P. Mazouch*
  + **D. Blatná, L. Hudrlíková**: Robust Regression and Europe2020 Indicators
  + **J. Zbranek**: Analysis of the Labour Inputs Focusing on the Average Hourly Wages in the Input-Output Framework
  + **L. Valentová Půlpánová**: Understanding Government Consumption: A Case Study of the Czech Republic
  + **M. Šimková, J. Sixta**: The Development of the Consumption of Czech Pensioners
  + **O. Šimpach**: The Forecasts for Inflation Rate and Unemployment Rate Using the Phillips Curve

15,30 – 16,00 *Coffee Break*

16,00 – 17,30 *Parallel Sessions*

* Risk and Insurance (Conference Room) *Chair: W. Ostasiewicz*
  + **M. Boďa, V. Roháčová**: Robust Formulation of a Parametric Value at Risk Model
  + **S. Heilpern**: Calculation of Risk Measure for Aggregate Dependent Risk
  + **P. Zimmermann**: Some properties of the Index Clause
  + **J. Špirková**: The Impact of a Ban on the Use of Gender in Pension Insurance
* Non-Market Services (Small Room) *Chair: S. Hronová*
  + **P. Kráľ et al.**: Using Data Mining to Build Applicant Profiles of Matej Bel University
  + **P. Laco**: Information Sharing and Information Systems at the Faculty of Economics
  + **M. Hužvár, Z. Rigová**: Efficiency of Performance of Higher Education Institutions
  + **C. Kozyra, B. Zmyslona**: National Health Fund – the Mine of Data about Quality and Efficiency of Health Services
  + **V**. **Jeřábková**: Methods for Measuring the Efficiency of Social Services

18,30 – 22,30 *Conference Dinner*

**Friday 31 Aug**

9,00 – 10,00 *Breakfast*

10,00 – 11,30 *Parallel Sessions*

* Other Methodology Achievements (Conference Room) *Chair: H. Řezanková*
  + **I. Malá**: Bayesian Approach to a Mixture of Lognormal Distributions
  + **J. Bartošová**: Tools for Modelling of Heterogeneity and Dynamics in Household Income
  + **O. Vilikus**: Hybrid Approach in Choice-Based Conjoint Analysis
  + **J. Vild**: Latent Class Analysis
* Business Cycle , Convergence and Sustainability (Small Room) *Chair:* *J. Fischer*
  + **M. Hužvár, K. Makovínyiová, R. Zimka**:Bautin Bifurcation in an Advertising Diffusion Model
  + **E. Zimková, V. Úradníček**: Macroecomic and Microeconomic Aspects of the Structural Convergence of the Czech Republic, Poland and Slovakia to Germany
  + **M. Boďa, V. Roháčová, L. Striežovská**: An Approach to Finding Business Cycles: a Case Study of Three Countries
  + **P. Musil, J. Kramulová, J. Čadil, P. Mazouch**: Regional Price Levels and their Relationship to Regional Indicators – the Case of the Czech Republic
  + **L. Petkovová, K. Helman, J. Kramulová, J. Zeman**: Sustainable Development Indicators at the Regional Level in the Czech Republic

11,30 – 11,50 *Coffee Break*

11,50 – 12,30 *Plenary session* (Conference Room) *Chair: R. Hindls*

* History
  + **P. Závodský**: Karl Joseph Czoernig and his Statistical Description of Liberec
* Closing Ceremony (**R. Hindls, W. Ostasiewicz, R. Zimka**)

12,30 – 13,30 *Lunch*

14,00 – 19,00 *Trip to Jested (1012 m)*

**Saturday 1 Sep**

9,00 – 10,00 *Breakfast*

10,00 – 18,00 *Trip to Jizerske hory*

**Sunday 2 Sep**

9,00 – 10,00 *Breakfast*