



The 9<sup>th</sup> Professor Aleksander Zeliaś International Conference  
on  
*MODELLING AND FORECASTING  
OF SOCIO-ECONOMIC PHENOMENA*

May 12–15, 2015 Zakopane, Poland

PROGRAMME

**Tuesday, May 12, 2015**

- 16.30 - Departure for Zakopane by coach from the Main Building of the University
- 18.30 - Lodging in Conference-Recreation Center HYRNY, Piłsudskiego 20 Street, Zakopane
- 19.00–20.00 - Supper

**Wednesday, May 13, 2015**

- 8.00–8.45 - Breakfast
- 8.45–8.50 - Opening Address by Prof. dr hab. Józef Pociecha
- 8.50–8.55 - Opening Address by president of the Committee of Statistics and Econometrics, the Polish Academy of Sciences – Prof. dr hab. Jacek Osiewalski
- 8.55–9.00 - Opening Address by authorities representative of Cracow University of Economics

**Invited Session**

*Chairperson: Prof. dr hab. Józef Pociecha (Cracow University of Economics)*

- 9.00–9.45 - Prof. Dr. Roberto Rocci, dr Monia Ranalli  
*“A Pairwise Likelihood Approach to Cluster Ordinal Data”*
- 9.45–10.00 - Discussion
- 10.00–10.45 - Prof. dr hab. Andrzej Sokołowski  
*“Direct Estimators of the Mode”*
- 10.45–11.00 - Discussion
- 11.00–11.30 - Coffee Break

**Session I: Macroeconometric analyses**

*Chairperson: Prof. dr hab. Krzysztof Jajuga (Wroclaw University of Economics)*

- 11.30–11.50 - Dr Marek Dąbrowski, dr Justyna Wróblewska  
*“Has Exchange Rate Flexibility of the Polish Zloty Been Conductive to Shock Absorbtion”*
- 11.50–12.00 - Discussion
- 12.00–12.20 - Prof. PK dr hab. Victor Shevchuk  
*“Industrial Output and Foreign Trade Dynamics in Large Devaluations. The Experience of Ukraine”*
- 12.20–12.30 - Discussion
- 13.00–14.00 - Lunch

## **Session II: Contemporary quantitative analyses**

*Chairperson: Prof. dr hab. Grażyna Trzpiot (University of Economics in Katowice)*

- 15.00–15.20 - Prof. UG dr hab. Paweł Miłobędzki  
*“The Components of Bid-Ask Spreads on the Warsaw Stock Exchange”*
- 15.20–15.30 - Discussion
- 15.30–15.50 - Dr hab. Daniel Kosiorowski, dr Dominik Mielczarek, mgr Ewa Szlachetowska  
*“Clustering of Functional Objects in Energy Load Prediction Issues”*
- 15.50–16.00 - Discussion
- 16.00–16.20 - Dr Monika Papież, dr Sławomir Śmiech  
*“Is it Possible to Successfully Forecast Short-Term Prices of Oil?”*
- 16.20–16.30 - Discussion
- 16.30–17.00 - Coffee Break

## **Session III: Socio-demographic analyses**

*Chairperson: Prof. dr hab. Józef Pocięcha (Cracow University of Economics)*

- 17.00–17.20 - Prof. dr hab. Anatoliy Pilyavskyy  
*“Efficiency of Health Care In Ukraine”*
- 17.20–17.30 - Discussion
- 17.30–17.50 - Dr Zinaida Palian  
*“Statistical Estimation of Hypothetical Losses of Ukrainian Population”*
- 17.50–18.00 - Discussion
- 18.00–18.20 - RNDr. Ján Gogola, PhD.  
*“Modelling Mortality Rate of the Very Old”*
- 18.20–18.30 - Discussion
- 19.00–20.00 - Supper

## **Thursday, May 14, 2015**

- 8.00–8.45 - Breakfast

## **Session IV: Statistical methods and their applications (session in Polish)**

*Chairperson: Prof. dr hab. Tadeusz Kufel (Nicolaus Copernicus University in Toruń)*

- 9.00–9.20 - Prof. dr hab. Marek Walesiak  
*“The Proposal of Procedure which Allows to Isolate Groups of Normalization Formulas that Lead to Similar Linear Orderings of a Set of Objects”*
- 9.20–9.30 - Discussion
- 9.30–9.50 - Prof. UE dr hab. Małgorzata Markowska, prof. dr hab. Danuta Strahl  
*“Smart Development and Vulnerability to Crises in UE Regions – Evaluation with Logistic Regression”*
- 9.50–10.00 - Discussion
- 10.00–10.20 - Prof. UEP dr hab. Elżbieta Gołata, prof. UEP dr hab. Grażyna Dehnel  
*“Robust Estimation in the Register-Based Business Survey”*
- 10.20–10.30 - Discussion
- 10.30–11.00 - Coffee Break

## Session V: Problems in modelling of economic processes (session in Polish)

Chairperson: Prof. dr hab. Marek Walesiak (Wroclaw University of Economics)

- 11.00–11.20 - Prof. US dr hab. Jacek Batóg  
*“Econometric Analysis of Influence of Economic Downturn on Public Debt in European Union”*
- 11.20–11.30 - Discussion
- 11.30–11.50 - Prof. dr hab. Natalya V. Kovtun  
*“Index Models of the Evaluation of the Foreign Trade Conditions and the Analysis of the Factor Effect”*
- 11.50–12.00 - Discussion
- 12.00–12.20 - Dr Paweł Kufel  
*“Two and Three Regime Threshold Model Comparison of Business Cycle Modeling”*
- 12.20–12.30 - Discussion

### **12.30–13.30 - Poster session**

- Dr Marcin Błażejowski, dr Jakub Gazda, dr Jacek Kwiatkowski  
*“Bayesian Model Averaging in Studies on Economic Growth in EU Regions – Application of the Gretl BMA Package”*
- Mgr Mateusz Bocian, dr hab. Daniel Kosiorowski  
*“Functional Classifiers in Management of the Internet Service”*
- Dr Bożena Boryczko  
*“Energy Forecasts and Their Reliability”*
- Dr Justyna Brzezińska  
*“Rasch Models in  $eRm$  Package in R”*
- Prof. US dr hab. Iwona Foryś, dr Barbara Batóg  
*“Forecasting of Property Developers’ Activity on Polish Housing Market by Means of Spatio-temporal Analogies”*
- Dr Katarzyna Frodyma  
*„Spatio-Temporal Analysis of the Targets Execution Level of the Energy from Renewable Sources Share in European Union”*
- Dr inż. Wojciech Gamrot  
*“Accuracy Assessment for the Simulation-Based Estimates of Population Total”*
- Dr Ewa Genge  
*“A Longitudinal Study of Polish Emigration Attitudes: a Latent Markov Model Approach”*
- Dr Mieczysław Gruda  
*“Multi-Criteria Evaluation of Regional Competitiveness”*
- Mgr Przemysław Jaśko  
*“Statistical Arbitrage – Critical View”*
- Mgr Marta Karaś, mgr Emilia Cichowska  
*“5 Years after the Crisis – Do Markets still Remember It?”*
- Mgr Marta Kuc  
*“The Use of Markov Chains in the Social Convergence Analysis”*
- Mgr Katarzyna Łęczycka  
*“Quality Evaluation of the Model-based Forecasts of Implied Volatility Index”*
- Dr Marcin Miczka  
*“Risk Management in the Field of Intelligent Manufacturing”*
- Mgr Michał Miłek  
*“Detecting Structural Changes in the Time Series in the Use of Simulation Methods”*
- Dr Michał Pietrzak  
*“The Use of Spatial Taxonomic Measure of Development (pTMR) in Analysis of the Situation on the Labour Market in Poland”*

Dr Radosław Pietrzyk, dr Anna Jędrzychowska  
*“Adjusting of Compensation for Loss of Earnings Using Forecast the Future Wages”*  
Dr Radosław Pietrzyk, dr Paweł Rokita  
*“Lowering Costs of Private Retirement by Sharing of Life-Length Risk within a Household”*  
Mgr Dominika Polko  
*“On Testing Dependency of Data in Multidimensional Contingency Tables”*  
Mgr inż. Jacek Stelmach  
*“On Applying the Genetic Algorithm in the Aggregation of Regression Models”*  
Mgr Damian Tracz, dr hab. Daniel Kosiorowski  
*“Robust Estimators for Pareto and Log-normal Distributions in Income Inequalities Evaluation”*  
Mgr Łukasz Wawrowski  
*“Spatial Fay-Herriot Model in Poverty Estimation”*

14.00–15.00 - Lunch

15.00–19.00 - Guided tour

19.30 - Ceremonial supper

## **Friday, May 15, 2015**

8.00–8.45 - Breakfast

### **Session VI: Statistical methods in economic research (session in Polish)**

*Chairperson: Doc. Ing. Eva Sodomová, PhD. (University of Economics in Bratislava)*

9.00–9.20 - Prof. dr hab. Andrzej Bąk  
*“Nested Logit Model in Consumer Preferences Analysis”*

9.20–9.30 - Discussion

9.30–9.50 - Prof. UEK dr hab. Barbara Pawełek, dr Jadwiga Kostrzewska, dr Artur Lipieta  
*“Problem of Outliers in the Study of the Construction Enterprises’ Financial Standing in Poland”*

9.50–10.00 - Discussion

10.00–10.20 - Doc. RNDr. Viera Labudová, PhD.  
*“Household Consumer Expenditure Inequalities In Slovakia”*

10.20–10.30 - Discussion

10.30–11.00 - Coffee Break

### **Session VII: Long-term and short-term forecasting (session in Polish)**

*Chairperson: Prof. dr hab. Anatoliy Pilyavskyy (Lviv Academy of Commerce)*

11.00–11.20 - Prof. dr hab. Grażyna Trzpiot, dr Justyna Majewska  
*“Modeling Longevity Risk Based on Population Projection of CSO till 2050 Year”*

11.20–11.30 - Discussion

11.30–11.50 - Dr Jan Acedański  
*“Factor Shares and Income and Wealth Inequalities”*

11.50–12.00 - Discussion

12.00–12.30 - Summary Discussion led by Prof. dr hab. Józef Pocięcha

12.30–13.30 - Lunch

13:30 - Departure for Cracow by coach