



THE 11TH PROFESSOR ALEKSANDER ZELIAS
INTERNATIONAL CONFERENCE ON
*MODELLING AND FORECASTING OF SOCIO-ECONOMIC
PHENOMENA*
MAY 9-12, 2017, ZAKOPANE, POLAND

PROGRAMME

Tuesday, May 9, 2017

- 16:00 - 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 10, 2017

- 8:00 – 8:45 - Breakfast
8:45 – 8:55 - Opening Address by Prof. dr hab. Józef Pociecha
8:55 – 9:00 - Opening Address by authorities representative of Cracow University of Economics

Invited Session (session in English)

Chairperson: prof. dr hab. Józef Pociecha

- 9.00 – 9.45 - Prof. Tadashi Imaizumi
“On how to visualize asymmetries of large proximity matrix by asymmetric MDS”
9:45 – 10:00 - Discussion
10:00 – 10:45 - Prof. dr hab. Józef Dziechciarz
“Quality of the university. Some aspects of measurement, analysis and modelling”
10:45 – 11:00 - Discussion
11:00 – 11:30 - Coffee break

Session I: Contemporary problems of statistics (session in English)

Chairperson: prof. dr hab. Krzysztof Jajuga

- 11:30 – 11:50 - Prof. Andreas Geyer-Schulz, Tino Fuhrmann, Marvin Schweitzer, Peter Kurz
“Collinearity in product configuration data”
11:50 – 12:00 - Discussion
12:00 – 12:20 - Prof. dr hab. Andrzej Sokołowski, dr Sabina Denkowska, dr Kamil Fijorek
“Separability index for cluster analysis”
12:20 – 12:30 - Discussion
12:30 – 12:50 - Prof. UEK dr dab. Jerzy Marzec, prof. dr hab. Jacek Osiewalski, dr Andrzej Pisulewski
“Economies of scope or specialization: new local measures”
12:50 – 13:00 - Discussion
13:00 – 14:00 - Lunch

Session II: Modelling economic processes (session in English)

Chairperson: prof. dr hab. Jacek Osiewalski

- 15:00 – 15:20 - Prof. dr hab. Aleksander Welfe
„Real exchange rates, US dollar and crude oil price in tripolar model”
15:20 – 15:30 - Discussion

15:30 – 15:50 - Prof. UEK dr hab. Marek Dąbrowski, dr hab. Monika Papież, dr hab. Sławomir Śmiech
„A statistically-based classification of de facto exchange rate regimes”

15:50 – 16:00 - Discussion

16:00 – 16:20 - Prof. PK dr hab. Viktor Shevchuk, dr Roman Kopych
“Symmetry of output effects of government expenditure and revenues in Ukraine”

16:20 – 16:30 - Discussion

16:30 – 17:00 - Coffee break

Session III A: Various problems of economic research (session in English)

Chairperson: prof. dr hab. Aleksander Welfe

17:00 – 17:20 - Prof. UEK dr hab. Marek Dąbrowski, dr Justyna Wróblewska
“Insulating property of the exchange rate regime in Central and Eastern European countries”

17:20 – 17:30 - Discussion

17:30 – 17:50 - Prof. dr hab. Anatoliy Pilyavskyy, prof. William Aaronson Ph.D., ing. Liběna Černohorská Ph.D.
“The Visegrad group of banks. Comparative performance for the period 2009-2013”

17:50 – 18:00 - Discussion

18:00 – 18:20 - Florian Zechser Ph.D., prof. Joachim Rojahn
“A market-implied approach to measuring corporate diversification”

18:20– 18:30 - Discussion

18:30 -18:50 - Prof. dr hab. Jacek Osiewalski, mgr Beata Osiewalska
“A bivariate model of the number of children and the mother's age at first birth”

18:50 – 19: 00 - Discussion

19:00 – 20:00 - Supper

Session III B: Analysis of economic processes in the European Union (session in Polish)

Chairperson: prof. dr hab. Andrzej Sokołowski

17:00 – 17:20 - Dr Krzysztof Dmytrów, prof. US dr hab. Jacek Batóg
“Econometric analysis of productivity of capital in the European Union”

17:20 – 17:30 - Discussion

17:30 – 17:50 - Dr Katarzyna Frodyma
“Changes in the distribution of the renewable energy in the EU countries”

17:50 – 18:00 - Discussion

18:00 – 18:20 - Dr hab. Monika Papież, dr hab. Sławomir Śmiech, dr Katarzyna Frodyma
“Determinants of the renewable energy development in the EU countries. A 20-year perspective”

18:20– 18:30 - Discussion

19:00 – 20:00 - Supper

Thursday, May 11, 2017

8:00 – 8:45 - Breakfast

Session IV A: Health care statistics (session in English)

Chairperson: prof. dr hab. Anatoliy Pilyavskyy

8:45 – 9:05 - Prof. dr hab. Natalya V. Kovtun, Zinaida Palian Ph.D., Igor M. Motyzuk Ph.D.
„Statistical analysis of trends and factors in cancer disease of women of reproductive age in Ukraine”

9:05 – 9:10 - Discussion

9:10 – 9:30 - Pavla Jindrová Ph.D., ing. Lucie Kopecká
„Assessment of risk factors of serious diseases in OECD countries”

9:30 – 9:35 - Discussion

9:35 – 9:55 - RNDr. Eva Kotlebová Ph.D., prof. Erik Šoltés Ph.D.,
”Application of bayesian methods in analysis of unavailability of health care in Slovakia”

9:55 – 10:00 - Discussion

10:00 – 10:20 - Ing. Lucie Kopecká, Pavla Jindrová Ph.D.
„Comparison of mortality due to critical illnesses in the EU countries”

10:20 – 10:25 - Discussion

10:25 – 10:50 - Coffee break

Session IV B: Problems of socio-economic research I (session in Polish)

Chairperson: prof. dr hab. Marek Walesiak

8:45 – 9:05 - Prof. dr hab. Grażyna Trzpiot, dr Justyna Majewska
„Application extreme value theory to model life expectancy”

9:05 – 9:10 - Discussion

9:10 – 9:30 - Prof. UEK dr hab. Marcin Salamaga
„Identifying patterns of fiscal consolidation on the example of EU countries”

9:30 – 9:35 - Discussion

9:35 – 9:55 - Prof. UEK dr hab. Stanisław Wanat, dr Krzysztof Guzik
”Dependence uncertainty and the risk diversification effect in Solvency II”

9:55 – 10:00 - Discussion

10:00 – 10:20 - Prof. UEK dr hab. Paweł Lula, mgr Urszula Cieraszewska, mgr Monika Hamerska
„Cluster analysis of research papers based on UDC codes and exploratory analysis of abstracts. Comparative approach”

10:20 – 10:25 - Discussion

10:25 – 10:50 - Coffee break

Session V A: Statistical methods and econometrics (session in English)

Chairperson: prof. dr hab. Józef Dziechciarz

10:50 – 11:10 - Prof. UEK dr hab. Daniel Kosiorowski, mgr Ewa Szlachtowska
„K-local median algorithm for functional data in empirical analysis of air pollution data”

11:10 – 11:15 - Discussion

11:15 – 11:35 - Dr Justyna Brzezińska, dr Aneta Rybicka
“Multivariate statistical analysis of air emission in EU”

11:35 – 11:40 - Discussion

- 11:40 – 12:00 - Dr Łukasz Lenart, dr Błażej Mazur
“Business cycle analysis with short time series: a stochastic versus a non-stochastic approach”
- 12:00 – 12:05 - Discussion
- 12:05 – 12:25 - Dr Roman Huptas
“Linear autoregressive volume models for point and density forecasting of trading volume from the Polish stock market”
- 12:25 – 12:30 - Discussion
- Session V B: Problems of socio-economic research II (session in Polish)**
Chairperson: prof. dr hab. Grażyna Trzpiot
- 10:50 – 11:10 - Prof. dr hab. Marek Walesiak
„An application of multidimensional scaling to assess the measurement and the changes in the level of social cohesion of the Lower Silesia region in the period 2005–2015”
- 11:10 – 11:15 - Discussion
- 11:15 – 11:35 - Prof. UE dr hab. Małgorzata Markowska, prof. dr hab. Danuta Strahl
“Relative Index of Enterprise Innovation Activity for Polish Provinces”
- 11:35 – 11:40 - Discussion
- 11:40 – 12:00 - Dr hab. Sławomir Śmiech, dr Kamil Fijorek, dr hab. Monika Papież
“Volatility spillovers between food, energy, US dollar, bond and equity markets. Evidence from Diebold-Yilmaz’s approach.”
- 12:00 – 12:05 - Discussion
- 12:05 – 12:25 - Prof. UEP dr hab. Grażyna Dehnel
“GREG estimation with reciprocal transformation for polish business survey”
- 12:25 – 12:30 - Discussion
- 12:30 – 13:30 - **Poster session**
- Dr Jan Acedański
„Overlapping generation models with housing: impact of the key parameters on the models’ outcomes”
- Dr Adam P. Balcerzak, dr Michał Pietrzak
„Digital economy in Polish regions. Proposal of measurement via TOPSIS with generalized distance measure GDM”
- Dr Beata Bal-Domańska
„Klasyfikacja podregionów polski z uwagi na strukturę przemysłu”
- Dr hab. Jacek Białek
„Generalization of the geo-logarithmic price index family”
- Dr Justyna Brzezińska
„Multivariate statistical analysis of information society in Poland”
- Dr Marta Dziechciarz-Duda
„Socio-economic and demographic factors of Polish households’ material wealth. Selected aspects”
- Prof. dr hab. Ewa Drabik
„Several remarks reverse engineering, category theory, quantum games and selected physical models using in used for the purposes of modeling of the economic phenomena”
- Dr inż. Karol Flisikowski
„A spatio-temporal approach to intersectoral labor and wage mobility”
- Prof. US dr hab. Iwona Foryś, dr Barbara Batóć
„Distance between the biggest Polish cities according to the condition of housing market in different phases of business cycle”
- Dr inż. Monika Hadaś-Dyduch
„Artificial neural networks as one of the methods mitigating the edge effect of the wavelet analysis in the study of macroeconomic indicators”

Dr Sergiusz Herman

„*Industry characteristics of joint-stock companies in Poland and their bankruptcy prediction*”

Mgr Mateusz Jankiewicz, prof. UMK dr hab. Elżbieta Szulc

„*Situation on labour market in the medium-sized urban centres of the Kujawsko-Pomorskie Voivodeship and the problem of unemployment in the province*”

Mgr Tomasz Jastrzębski

„*Systemic risk in the banking sector: A practical perspective*”

Dr Marta Kuc

„*Spatial differences in sustainable development components in nordic regions*”

Dr Marta Kuc, mgr Marta Gawlas

„*Taxonomic analysis of Tourism Potential of Polish mountain counties*”

Dr hab. Tomasz Kuszewski, dr Agata Sielska

„*Source of data as a determinant of the assessment of agricultural producer's financial situation*”

Dr Łukasz Lenart

„*Exponential smoothing models with time-varying periodic parameters*”

Dr Błażej Mazur

„*Density forecasting performance of alternative GARCH and DCS models for daily financial returns*”

Prof. UEK dr hab. Barbara Pawełek, mgr Dorota Grochowina

„*Forecasting the bankruptcy of companies: the use of the random subspaces and random forests methods*”

Dr Michał Pietrzak, dr Bartosz Ziemkiewicz

„*Considering the use of random fields in the Modifiable Areal Unit Problem*”

Mgr Dominika Polko-Zając

„*On comparing populations based on two sets of variables*”

Dr hab. Agnieszka Przybylska-Mazur

„*Expenditure rules in the context of a balanced budget*”

Dr Aneta Ptak-Chmielewska

„*Qualitative factors in statistical models used for assessing credit risk of enterprises*”

Mgr Angelina Rajda-Tasior

„*Selection of the risk assessment methods for industry – review and characterization*”

Dr Jerzy Rydlewski, prof. UEK dr hab. Daniel Kosiorowski, dr Dominik Mielczarek

„*SVM classifiers for functional data in monitoring of the Internet users behaviours*”

Dr Małgorzata Stec, dr Małgorzata Wosiek

„*Statistical evaluation of sustainable development of Polish voivodeships in respect of social domain*”

Dr inż. Jacek Stelmach

„*On the permutation extension of unit root tests*”

14:00 – 15:00 - Lunch

15:00 – 19:00 - Guided tour

20:00 - Ceremonial dinner

Friday, May 12, 2017

8:00 – 8:45 - Breakfast

Session VI: Economic forecasting

Chairperson: prof. UŁ dr hab. Alina Jędrzejczak

9:00 – 9:20 - Prof. UEK dr hab. Barbara Pawełek

„*Prediction of company bankruptcy in the context of changes in the economic situation*“

9:20 – 9:25 - Discussion

9:25 – 9:45 - Dr Marcin Błażejowski, dr Paweł Kufel

”*Forecasting macroeconomic processes using threshold autoregression. Final remarks on gretl's Threshold_Models package*“

9:45 – 9:50 - Discussion

9:50 – 10:20 - Coffee break

Session VII: Issues of social statistics

Chairperson: prof. UEP dr hab. Grażyna Dehnel

10:20 – 10:40 - Prof. UŁ dr hab. Alina Jędrzejczak, dr hab. Dorota Pekasiewicz

“*Analysis of the properties of selected inequality measures based on quantiles with the application to the Polish income data.*”

10:40 – 10:45 - Discussion

10:45 – 11:05 - Dr hab. Krzysztof Piontek, dr Radosław Pietrzyk, dr Paweł Rokita

”*Risk measurement for goals realization in a household financial plan*“

11:05 – 11:10 - Discussion

11:10 – 11:30 - Prof. UEK dr hab. Paweł Ulman

„*Household income from abroad and its determinants*“

11:30 – 11:35 - Discussion

11:35 – 11:55 - Dr Agnieszka Wałęga, dr Grzegorz Wałęga

”*Modelling the Distribution of Loan Repayments of Households in Poland*“

11:55 – 12:00 - Discussion

12:00 – 12:30 Summary Discussion led by Prof. dr hab. Józef Pociecha

12:30 – 13:30 - Lunch

13:30 - Departure for Cracow by coach