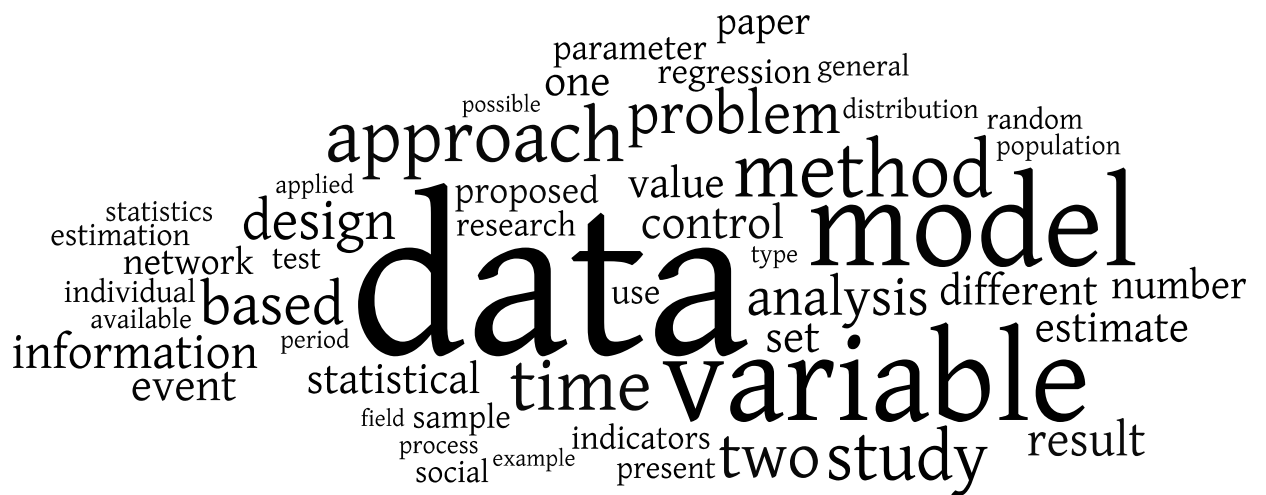


International Conference

APPLIED STATISTICS

2015

ABSTRACTS and PROGRAM



September 20 - 23, 2015

Ribno (Bled), Slovenia

<http://conferences.nib.si/AS2015>

8.00–9.00 **Registration**

9.00–9.10 **Opening of the Conference** (Hall 1) *Chair: Andrej Blejec*

9.10–10.00 **Invited Lecture** (Hall 1) *Chair: Janez Stare*

1. Dynamic treatment regimes as a prediction problem

Elja Arjas

10.00–10.20 **Break**

10.20–11.40 **Statistical Modeling** (Hall 1) *Chair: Elja Arjas*

1. Potential parenthood and career progression of men and women - a simultaneous hazards approach

Martin Biewen and Stefanie Seifert

2. Analysing survival of groups that outlive the population – the French Olympians study

Maja Pohar Perme, Juliana Antero-Jacquemin, Aurelien Latouche and Jean-François Tous-saint

3. Combining cross-sectional and panel information to disentangle attrition models in panels

Ulrich Pötter and Holger Quellenberg

4. How to handle underreporting utilizing statistical models

Herwig Friedl

11.40–12.00 **Break**

12.00–13.20 **Measurement** (Hall 1) *Chair: Nataša Kejžar*

1. Visibility graph analysis of seismicity: application to real and synthetic sequences

Luciano Telesca, Michele Lovallo, Alejandro Ramirez-Rojas and Tony A. Stabile

2. Agreement among physicians assigning ICF categories based on medical documentation in a prosthetics and orthotics outpatient clinic

Gaj Vidmar, Helena Burger, Barbara Kavčič, Nataša Bizovičar, Pavel Ptyushkin and Bernard Francq

3. Weighting methodology for a composite indicator of well-being

Jože Rován, Kaja Malešič and Lea Bregar

4. Outcome-based measures of the Rasch model fit

Gregor Sočan

12.00–13.20 **Statistical Applications**

(Hall 2) *Chair: Klemen Pavlič*

1. **Evaluation of phenotypic variation of wheat hybrids for resistance to Fusarium head blight**

Maria Surma, Tadeusz Adamski, Halina Wiśniewska, Karolina Krystkowiak, Anetta Kuczyńska, Zygmunt Kaczmarek and Stanislaw F. Mejza

2. **Multivariate approach for selection of SSD lines in grain legumes**

Tadeusz Adamski, Maria Surma, Zygmunt Kaczmarek, Wojciech Świecicki, Paweł Barzyk, Anetta Kuczyńska and Karolina Krystkowiak

3. **X bar control chart for non-normal symmetric distributions**

Kristina Veljkovic

4. **Control charts in anticoagulant treatment**

Susana Martins, Lino Costa and Pedro Oliveira

13.20–15.00 **Lunch**

15.00–16.20 **Modeling and Simulation**

(Hall 1) *Chair: Herwig Friedl*

1. **The distribution of time delay concerning breakdown point**

Biljana C. Popović, Vidosav Lj. Marković, Aleksandar P. Jovanović and Milica M. Skamagkoulis

2. **Comparing partitions**

Marjan Cugmas and Anuška Ferligoj

3. **Discrete kernels and their application to sport matches results**

Blanka Sediva

4. **Model selection and model averaging on multiply-imputed data sets in a child growth study: a comparison**

Khuneswari Gopal Pillay, John H. McColl, Charlotte Wright and The Gateshead Millenium Study Core Team

15.00–16.20 **Statistical Applications**

(Hall 2) *Chair: Gaj Vidmar*

1. **Historical time series of Gross Domestic Product**

Jaroslav Sixta and Martina Simkova

2. **Regional input-output analysis**

Kristyna Vltavska and Jaroslav Sixta

3. **How to estimate utilities in Health Economics**

Günal Bilek

4. **Determining factors that affects housing prices in Turkey by Bayesian network**

Tuba Koç, Mehmet Ali Cengiz, Haydar Koç and Efehan Ulaş

16.20–16.40 **Break**

16.40–17.40 **Measurement and Design of Experiments** (Hall 1) *Chair: Katarina Košmelj*

1. **The journalistic dimension of statistics. Reporting human development and its quantification.**
Alessandro Martinisi
2. **D-optimality of experimental designs**
Bronislaw Ceranka and Małgorzata Graczyk
3. **Pilot study: current experiences with mixed mode including web mode in opinion survey (official statistics)**
Marta Arnež, Mateja Zgonec and Nino Zajc
4. **Effect of supporting variables on imputation of missing data**
Yucel Tandogdu

16.40–17.40 **Statistical Applications** (Hall 2) *Chair: Jože Rován*

1. **Clustering analysis of the European forest sector production**
Michael D. Burnard, Monika Cerinšek, Andreja Kutnar and Boris Horvat
2. **Fuzzy knowledge representation in Bayesian networks**
Duygu İçen and Derya Ersel
3. **Design and application of phase-II joint monitoring of location and scale based on percentile modified rank scores**
Amitava Mukherjee and Rudra Sen
4. **Microsimulation as a tool for the evaluation of personal taxation and social security in Finland**
Antti Liski and Erkki Liski

9.10–10.00 **Invited Lecture** (Hall 1) *Chair: Mihael Perman*

1. **Networks: between measures and data**
Ernst C. Wit

10.00–10.20 **Break**

10.20–11.40 **Biostatistics and Bioinformatics** (Hall 1) *Chair: Ernst C. Wit*

1. **Never fit Sequence - The design and analysis of multi-period clinical trials**
Hans-Ulrich P Hockey
2. **Comparison of selection methods of genotypes based on non-replicated breeding experiments**
Stanislaw F. Mejza and Iwona Mejza
3. **Reliability of measurements with continuous outcomes applied to heart rate variability parameters**
Nataša Kejžar, Breda Podjaveršek and Fajko F. Bajrović
4. **Comparing net survival distributions with the log-rank type test**
Klemen Pavlič and Maja Pohar Perme

11.40–12.00 **Break**

12.00–13.20 **Biostatistics and Bioinformatics** (Hall 1) *Chair: Maja Pohar Perme*

1. **Statistical approach for the development, prediction, and validation of a simple risk score: application to a neurocritical care study**
Jay Mandrekar
2. **Challenges in accurate prediction of rare events with penalized likelihood methods**
Georg Heinze, Angelika Geroldinger, Rok Blagus and Lara Lusa
3. **Accurate prediction of rare events with Firth's penalized likelihood approach**
Angelika Geroldinger, Daniela Dunkler, Rainer Puhr, Rok Blagus, Lara Lusa and Georg Heinze
4. **Penalized logistic regression with rare events: preliminary results**
Lara Lusa, Rok Blagus, Angelika Geroldinger and Georg Heinze

12.00–13.20 **Statistical Applications** (Hall 2) *Chair: Stanislaw F. Mejza*

1. **The use of R in Official Statistics**
Jerneja Pikelj
2. **High-quality low-risk Public Use Files: an empirical evaluation of open-source anonymization software**
Sebastian Kočar
3. **Determination of the profile of social media usage habits by the Latent Class Analysis**
Haydar Koç, Mehmet Ali Cengiz, Tuba Koç and Efehan Ulaş

4. Higher order moments of order statistics from Lindley distribution and associated inference

Khalaf S. Sultan and W.S. AL-Thubyani

13.20–14.30 **Lunch**

14.30 **Excursion**

9.10–10.00 **Invited Lecture** (Hall 1) *Chair: Anuška Ferligoj*

1. **A few notes on centrality and flow**
Steve Borgatti

10.00–10.20 **Break**

10.20–11.40 **Network Analysis** (Hall 1) *Chair: Steve Borgatti*

1. **Use of SAOM for modelling of network structure stability**
Luka Kronegger, Marjan Cugmas and Anuška Ferligoj
2. **Multilevel blockmodeling**
Aleš Žiberna
3. **Using semantics to recommend collaboration across domains in biomedicine**
Dimitar Hristovski, Andrej Kastrin and Thomas C. Rindflesch
4. **Methodological challenges of measuring and analysing the Slovenian Twitter community**
Ana Slavec and Vladimir Batagelj

10.20–11.40 **Statistical Applications** (Hall 2) *Chair: Lara Lusa*

1. **Can clustering based on predictors' dynamics improve the accuracy of financial distress classifier?**
Lukas Sobisek and Maria Stachova
2. **Trend component estimation**
Tomáš Toupal, Patrice Marek and František Vávra
3. **GraphGibbs algorithm - A Gibbs sampling method for motif finding in DNA with initial graph representation of sequences**
Živa Stepančič
4. **Analysis of quantal models**
Emel Cankaya, Nick Fieller and Mutlu Kaya

11.40–12.00 **Break**

12.00–13.20 **Economics and Econometrics** (Hall 1) *Chair: Aleš Žiberna*

1. **A simple randomization test of spatial correlation in the presence of common factors**
Giovanni Millo
2. **Long-run regional equilibria in a large motor insurance market**
Giovanni Millo and Antonio Salera
3. **Does government fiscal spending impact the quality of the environment?**
Žiga Kotnik and Damjan Škulj

4. Estimating technical and scale efficiencies in airline industry: a non-parametric DEA approach

Burak Keskin, Efehan Ulaş and Enes Filiz

12.00–13.00 **Social Science Methodology**

(Hall 2) *Chair: Luka Kronegger*

1. Testing hypotheses on crime seriousness perceptions

Nace Čebulj and Matevž Bren

2. Sample size determination for testing two group variances of non-inferiority/superiority and equivalence with cost considerations

Wei-ming Luh and Jiin-huang Guo

3. The importance of balanced study designs in comparative studies

Ana Kolar

13.20–13.30 **Closing of the Conference**

(Hall 1) *Chair: Andrej Blejec*