

International Conference
APPLIED STATISTICS
2004

PROGRAM

September 19 – 22, 2004

Ljubljana, Slovenia

SUNDAY, September 19, 2004

9.00 Excursion to Dolenjska

MONDAY, September 20, 2004

8.00 – 9.15 Registration at City Hotel Turist

9.15 – 9.30 Opening of the Conference (Hall 1)

9.30 – 10.20 **INVITED LECTURE** (Hall 1) *Chair: Mihael Perman*
Brian Ripley, University of Oxford, UK
Data mining in large datasets

10.20 – 11.10 **INVITED LECTURE** (Hall 1) *Chair: Anuška Ferligoj*
Patrick Doreian, University of Pittsburgh, USA
A modest agenda of immodest goals for network analysts

11.10 – 11.30 BREAK

11.30 – 12.30 **Network Analysis I** (Hall 1) *Chair: Patrick Doreian*

1. **Islands**

Matjaž Zaveršnik, Vladimir Batagelj

2. **Analysis of the buyers' choice networks**

Simona Korenjak-Černe, Nataša Kejžar, Vladimir Batagelj

3. **Social networks in Slovenia: a comparative perspective**

Valentina Hlebec, Tina Kogovšek

12.30 – 14.30 LUNCH

14.30 – 15.30 **Social Science Methodology** (Hall 1) *Chair: Valentina Hlebec*

1. **Latent change variable models in studying intra-individual variability in coping measures**

Vesna Buško, Alija Kulenović

2. **Estimating the number of foreign-body injuries in childhood with the scale-up method**

Silvia Snidero, Bruno Morra, Roberto Corradetti, Dario Gregori

3. **Alternative approaches to least squares factor analysis**

Gregor Sočan

15.30 – 15.50 BREAK

15.50 – 17.10 **Statistical Theory and Methods** (Hall 1) *Chair: Robin Henderson*

1. **Indices of skewness derived from symmetric quantiles: statistical properties and application to European temperature data**
Maurizio Brizzi
2. **Effect of rounding on expected value and standard deviation**
Anton Cedilnik, Katarina Košmelj
3. **Asymptotic unbiased distribution function estimators on the basis of interval-censored data**
Mikhail S. Tikhov, Irina S. Efimenko
4. **Hierarchical modeling of correlated binary traits with applications to asthma and hay fever twins data**
M.M.Shoukri

15.50 – 17.10 **Statistical Applications I** (Hall 2) *Chair: Tina Kogovšek*

1. **Social integration of elderly in Slovenia**
Valentina Hlebec
2. **Logistic regression analysis of MRI data from breast cancer patients**
Masoud Yarmohammadi, Parviz Abdolmaleki
3. **Absolute, relative and time distance: Contradicting or complementary measures?**
Vasja Vehovar, Pavle Sicherl, Andraž Petrovčič, Vesna Dolničar
4. **Application areas of hidden Markov models**
Thomas Benesch

19.00 WELCOME RECEPTION, *City Hotel Turist*

TUESDAY, September 21, 2004

9.10 – 10.00 **INVITED LECTURE** (Hall 1) *Chair: Janez Stare*
Frank E. Harrell Jr., Vanderbilt University, USA
Statistical principles to live by

10.00 – 11.20 **Biostatistics** (Hall 1) *Chair: Frank E. Harrell Jr.*

1. **Estimation of optimal adaptive treatments using observational data: a regret-based approach to dynamic anticoagulation**
Robin Henderson, Catherine Fullwood, Syd Stewart
2. **Parsimonious modelling of time-dependent effects in the Cox model**
Stephan Lehr, Harald Heinzl, Michael Schemper
3. **Goodnes of fit in relative survival models**
Janez Stare, Robin Henderson, Maja Pohar
4. **Comparison of analytic models for the costs of the postinfarct patients**
Giulia Zigon, Dario Gregori

11.20 – 11.50 BREAK

11.50 – 12.50 **Modelling and Simulation** (Hall 1) *Chair: Maurizio Brizzi*

1. **Empirical estimation of outliers for different generating mechanisms**
D. K. Shangodoyin, Raghunath Arnab
2. **ML estimation in a random field based forward interest rate model**
Jozsef Gall, Gyula Pap
3. **Bayesian estimation of kinetic parameters: a particle approach**
Franz Konecny

11.50 – 12.50 **Statistical Applications II** (Hall 2) *Chair: Vasja Vehovar*

1. **The expansion of computers and the internet among Slovenian primary-school leavers**
Eva Podovšovnik
2. **A latent class invariant model of first-time clients versus long-term clients receiving drug treatment, controlling for a number of covariates**
Paul Cahill, Brendan Bunting

3. Intra-assessor inconsistency in setting performance standards*Hans J. Vos*

12.50 – 14.50 LUNCH

14.50 – 16.10 **Network Analysis II** (Hall 1) *Chair: Vladimir Batagelj***1. The effects of limiting the number of alters on composition and structure of social support networks***Tina Kogovšek, Valentina Hlebec***2. Sub-sampling of alters in collecting the data on ego-centred social networks***Luka Kronegger, Gašper Koren, Valentina Hlebec, Vasja Vehovar***3. Analysis of US patents network in time***Nataša Kežzar, Vladimir Batagelj***4. What do networks do for companies? Testing the effects of networks on corporate performance***Marko Pahor*

16.10 – 16.30 BREAK

16.30 – 17.50 **Data Analysis I** (Hall 1) *Chair: Matevž Bren***1. Steganography detection – noise analysis in image files***Igor Belič, Aleksander Pur***2. Quantification of customer satisfaction data: an approach based on the Spline transformation***Michele Gallo***3. Different statistical measures provide different perspectives on digital divide***Pavle Sicerl***4. The problem of concave sets with clustering***Mateja Nagode, Matej Francetič, Bojan Nastav*16.30 – 17.50 **Data Collection** (Hall 2) *Chair: Zenel Batagelj***1. Information and communication technologies usage in Slovenian households and enterprises***Andreja Kačič, Eva Belak, Rudi Seljak*

2. **Contingent versus unconditional incentives in WWW studies**
Anja S. Göritz
 3. **Effect of "grid" questions in Web survey questionnaires**
Katja Lozar Manfreda, Gašper Koren, Valentina Hlebec
 4. **Evaluation of hygienic environmental indices in village schools of Mazandaran state in Iran**
Bizhan Shabankhani
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WEDNESDAY, September 22, 2004

9.10 – 10.00 **INVITED LECTURE** (Hall 1) *Chair: Andrej Blejec*
K. Laurence Weldon, Simon Fraser University, Canada
Less parametric methods in applied statistics

10.00 – 10.20 BREAK

10.20 – 11.20 **Measurement and Modelling** (Hall 1) *Chair: K. Laurence Weldon*

1. **Assessing the "accuracy" of proxy-reports on attitudes towards immigrants in Germany**
Angela Jäger
2. **Translation of measurement instruments and their reliability: an example of Job-related Affective Well-Being Scale**
Nino Rode
3. **Stability of measures of centrality and prominence: a meta-analysis on fixed choice and free choice data**
Barbara Zemljič, Valentina Hlebec

11.20 – 11.40 BREAK

11.40 – 13.00 **Data Analysis II** (Hall 1) *Chair: Gregor Sočan*

1. **Exploratory analysis of vibration data for damage detection in civil engineering structures**
Shola Adeyemi, Michael L. Fugate, Brian J. Williams
2. **MixeR package for compositional data analysis**
Matevž Bren, Vladimir Batagelj
3. **Table-based visualisation of categorical data using spreadsheets**
Gaj Vidmar
4. **A hierarchical Bayes multilayer perceptron to analyze heterogeneous sales response**
Harald Hruschka

11.40 – 13.00 **Data Mining** (Hall 2) *Chair: Dimitar Hristovski*

1. **Web sites and communication: a textmining application in the banking sector**

Silvia Biffignandi

2. **Discovering the most important factors for communities of soil microarthropods using machine learning**

Damjan Demšar, Sašo Džeroski, Paul Henning Krogh, Thomas Larsen

3. **Analysis of example weighting in subgroup discovery by comparison of three algorithms on a real-life data set**

Branko Kavšek, Nada Lavrač

4. **Analysis of excretion of pineal gland hormone melatonin in ex-mercury miners with machine learning methods**

Alfred B. Kobal, Bernard Ženko, Darja Kobal, Mladen Krsnik, Sašo Džeroski, Milena Horvat, Joško Osredkar

13.00 – 15.00 LUNCH

15.00 – 19.00 **WORKSHOP I** (Hall 1)

Frank E. Harrell Jr., Vanderbilt University, USA

Statistical graphics for exploring data, presenting information, and understanding statistical models

15.00 – 19.00 **WORKSHOP II** (Hall 2)

Vladimir Batagelj, Andrej Mrvar, University of Ljubljana, Slovenia

Analysing data with PAJEK
