		Hall 1	Hall 2	
Sunday	10.30 – 11.00	Registration		
	11.00 – 11.10	Opening of the Conference		
	11.10 – 12.00	Invited Lecture		
	12.00 – 12.20	Break		
	12.20 – 13.40	Social Science	Data Mining	
		Methodology		
	13.40 – 15.00	Lunch		
	15.00 – 16.20	Design of Experiments Education		
	19.00	Reception		
Monday	9.10 – 10.00	Invited Lecture		
-	10.00 – 10.20	Break		
	10.20 – 11.40	Biostatistics and	Statistical Applications	
		Bioinformatics I	Ι	
	11.40 – 12.00	Break		
	12.00 – 13.20	Biostatistics and	Network Analysis	
		Bioinformatics II		
	13.20 – 14.30	Lunch		
	14.30	Excursion		
Tuesday	9.10 – 10.00	Invited Lecture		
	10.00 – 10.20	Break		
	10.20 – 11.40	Modeling and Simulation		
		I	Data Collection	
	11.40 – 12.00	Break		
	12.00 – 13.20	Econometrics	Mathematical Statistics I	
	13.20 – 15.00	Lunch		
	15.00 – 16.20	Modeling and Simulation II	Mathematical Statistics II	
Wednesday	9.10 – 10.30	Statistical Applications II	Statistical Applications III	
	10.30 – 10.50	Break		
	10.50 – 11.50	Statistical Applications IV	Modeling and Simulation III	
	12.00 – 12.20	Closing of the conference		
	12.30 – 14.00	Lunch		
	14.00 – 18.00	Workshop		

Chair: Vasja Vehovar

Chair: Donald Rubin

Chair: Aleš Žiberna

10.30–11.00 **Registration**

11.00–11.10 **Opening of the Conference**

11.10–12.00 **Invited Lecture** (Hall 1)

1. Direct and Indirect Causal Effects: A Helpful Distinction?

Donald Rubin

12.00-12.20 **Break**

12.20–13.40 **Social Science Methodology** (Hall 1)

- 1. Integration of Item Response Theory and Structural Equation Modeling with Dichotomous Data. An Application of Measurement Invariance in Political Preferences Lluis Coromina
- 2. Functional Independence Measure from the Classical Test Theory Perspective with an Eye on the Item Response Theory Approach Gaj Vidmar and Helena Burger
- 3. Comparing Student Grading Distributions Matevž Bren and Darko Zupanc
- 4. Integrated Modelling of European Migration
 James Raymer, Jonathan J. Forster, Peter W.S. Smith, Jakub Bijak, Arkadiusz Wiśniowski and
 Guy J. Abel

12.20–13.40 **Data Mining** (Hall 2)

- 1. Comparison of Rough Sets and Discriminant Analysis in the Study of Intangible Assets Agnes Maciocha
- 2. Yellow Pages Analysis by Using Web Mining Umman Tugba Simsek Gursoy and Serap Sahin
- 3. Association Rules Analysis for E-Commerce Data: An Application in Turkey Serap Sahin and Umman Tugba Simsek Gursoy
- 4. A Genetic Algorithm for Long-Term Gas Consumption Forecasting (1980-2007). A Case Study: Finland and France
 Ali Azadeh, Mahmoud Mahmoudi, Morteza Saberi, Ali Divsalar and Navid Rahmani

13.40–15.00 Lunch

Applied Statistics 2010

15.00–16.20 **Design of Experiments** (Hall 1)

Chair: Janez Stare

- 1. Locally D-optimal Design for Logit Models in Discrete Choice Experiments Habib Jafari
- 2. A Construction Method of Incomplete Split-Block Designs Supplemented by Control Treatments

Shinji Kuriki, Stanisław Mejza and Iwona Mejza

3. An Artificial Neural Network Approach to Forecast the Flexural Behaviour of Concrete and Lightweight Concrete Beams
Mehmet Kamanli, Mevlut Yasar Kaltakci, M. Sami Donduren and M. Tolga Cogurcu

4. Statistical Analyses of the Experimental Results on the Bond Behaviour of Reinforcing Concrete Columns Under Axial Load Effect which are Produced Site Conditions M. Tolga Cogurcu, M. Sami Donduren, Mustafa Altin and Mehmet Kamanli

15.00–16.00 **Education** (Hall 2)

Chair: Andrej Blejec

- 1. Trends of Inequal Gender Proportions in Most Demanding Educational Tracks Gašper Cankar
- 2. Where Does the PISA Test Score Gap Come From? A Country Comparison Alina S. Botezat and Ruben R. Seiberlich
- 3. The Role of Participation in Lifelong Learning in Fostering Social Cohesion Anna Rita Manca and Cynthia Villalba

19.00 **Reception**

9.10–10.00 **Invited Lecture** (Hall 1)

Chair: Janez Stare

1. Models, Assumptions and Confidence Limits John Copas

10.00-10.20 **Break**

10.20–11.40 **Biostatistics and Bioinformatics I** (Hall 1)

SI (Hall 1) Chair: John Copas

1. Evaluation of Multiple Allele Probabilities at a Single Locus for Ungenotyped Members of Complex Pedigrees
Gregor Gorjanc

2. Marginal Structural Models: Treatment in Reach Study Nursel Koyuncu and Emmanuel Lesaffre

- 3. Anisotropic and Inhomogeneous Hidden Markov Models for the Analysis of Water Quality Spatio-Temporal Data on a Cylindrical Lattice

 Luigi Spezia
- 4. A Propensity Score Approach to Comparing Costs of Hip Fracture Treatments Between Hospital Districts in Finland
 Antti Liski, Erkki P. Liski and Reijo Sund

10.20–11.40 **Statistical Applications I** (Hall 2)

Chair: Germa Coenders

- 1. Asset Price Models with Levy Processes Jelena Stanojević and Tijana Levajković
- 2. Determining the Risk of Contracting Cancer Using Logistic Regression Berna Yazıcı, Betül Kan, Gonca Mert and Aynur Küçükçongar
- 3. Modelling the Rainfall-Runoff Data of Susurluk Basin Using Neural Networks, Fuzzy Inference Systems and Time Series Models
 Alpaslan Yarar and Atila Dorum
- 4. Inflation and Market Power in Agriculture: A Case Study in the Banana Industry in Israel
 Tal Shahor

11.40-12.00 **Break**

12.00–13.20 **Biostatistics and Bioinformatics II** (Hall 1)

- Chair: Gaj Vidmar
- 1. Combination of Logistic Regression and Boosting to Predict Disease Outcome Jana Šilhavá and Pavel Smrž
- 2. Threshold Calibration for High-Dimensional Classification with Class Imbalanced Data Lara Lusa and Rok Blagus
- 3. An Optimized Model Development for Multiple Sequence Alignment Algorithm for Protein Sequence Analysis

Khubaib Ahmed Qureshi and Syed Faraz Raza Zaidi

4. A Nonparametric Generalized Additive Model for a Dichotomous Dependent Variable on Forest Fire Data

Ahmet Sezer, Betül Kan and Berna Yazıcı

12.00–13.00 **Network Analysis** (Hall 2)

- Chair: Nataša Kejžar
- 1. Using Social Network to Predict Behavior of Active Members of Web Forums Aleš Žiberna and Vasja Vehovar
- 2. Single and Multiple Name Generators for Measuring Social Support Networks Maja Mrzel and Valentina Hlebec
- 3. On Fide Network(s) of Chess Players Kristijan Breznik and Vladimir Batagelj

13.20-14.30 Lunch

14.30 Excursion

Chair: Lara Lusa

9.10-10.00 **Invited Lecture** (Hall 1)

1. Three-sided Hypothesis Testing: Simultaneous Testing of Superiority, Equivalence and Inferiority

Jelle Goeman

10.00-10.20 Break

10.20-11.40 **Modeling and Simulation I** (Hall 1)

Chair: Jelle Goeman

- 1. Hunting for Significance with the False Discovery Rate Sonja Zehetmayer, Martin Posch and Peter Bauer
- 2. A Permutation Test for Random Effect Models Dario Basso, Livio Finos and Gianmarco Altoè
- 3. Rank Tests in Measurement Errors Models Radim Navratil
- 4. Permutation Test for Partial Regression Coefficient on First-Order Autocorrelation Pradthana Minsan and Pachitjanut Siripanich

10.20-11.40 **Sampling Techniques and Data Collection** (Hall 2) Chair: Lluis Coromina

- 1. Algorithms for the Stratification of Skewed Populations Jane M. Horgan and Sebnem Er
- 2. Adaptive Cluster Sampling Based on Ranked Sets Girish Chandra and Hukum Chandra
- 3. Bayesian Bootstrap Approximation to Sampling Distributions Naoto Niki and Yoko Ono
- 4. Statistical Analyses of the Experimental Results on the Bond Behaviour of Reinforcing **Steel and Concrete**

M. Sami Donduren, M. Tolga Cogurcu, Mustafa Altin and Mehmet Kamanli

11.40-12.00 Break

12.00-13.20 **Econometrics** (Hall 1) Chair: Aleša L. Dolinar

- 1. There is Only One Statistical SoftwaRe Giovanni Millo
- 2. Non-linearity, Complexity and Limited Measurement in the Relationship Between Domain and Overall Life Satisfaction

Monica Gonzalez, Germa Coenders, Marc Saez and Ferran Casas

3. Noise-Indicator Nonlinear Stochastic Models and their Applications Vladica Stojanović and Biljana Popović

4. Plurality of Methods for the Categorical Variables: Empirics of Microfinance Impacts on Happiness in Thailand and Brazil

Thanawit Bunsit

12.00–13.20 **Mathematical Statistics I** (Hall 2)

1. Asymptotic Behavior of the Kernel Regression Estimator Under Different Rates of Censoring and Dependence

Zohra Guessoum and Elias Ould Said

2. Minimal Sufficiency in Rare Populations

Mohammad Moradi, Jennifer Brown and Miriam Hodge

3. Asymptotic Behavior of a Smooth Conditional Quantile Kernel Estimator for Censored and Dependent Data

Ourida Sadki and Elias Ould Said

4. Asymptotic Normality of a Kernel Mode Estimate Under RLT Model and Dependence Abdelkader Tatachak, Elias Ould Said and Ouafae Benrabah-Yazourh

13.20–15.00 Lunch

15.00–16.20 **Modeling and Simulation II** (Hall 1)

1. Loglinear Models for Contingency Table Justyna J. Brzezińska

2. A Comparison of the Most Commonly Used Measures of Association for Doubly Ordered Contingency Tables Via Simulation
Atilla Göktaş and Öznur İşçi

3. On Robust Ridge Regression and Robust Liu Estimator Betül Kan, Berna Yazıcı and Özlem Alpu

4. Using Artificial Neural Networks in Fuzzy Time Series Forecasting Cagdas Hakan Aladag

15.00–16.20 **Mathematical Statistics II** (Hall 2)

1. A Class of Asymptotically Normal Degenerate Quasi U-Statistics Aluisio Pinheiro, Pranab Kumar Sen and Hildete Prisco Pinheiro

2. Modified Power Divergence Estimators. Simulation and Performances in Normal Models

Iva Frýdlová and Václav Kús

3. Ordering Life Distributions Through Interval Entropy Function Fakhroddin Misagh, Gholam Hossein Yari and Rahman Farnoosh

4. Consistency and Robustness of Kolmogorov-Cramer-von Mises Type Estimators Václav Kús and Jitka Hanousková

Chair: Mihael Perman

Chair: Germa Coenders

Chair: Damjan Škulj

9.10–10.30 **Statistical Applications II** (Hall 1)

Chair: Katarina Košmelj

1. The Effects of Body Mass Index on Pregnancy Outcomes in the Rural Areas of North of Iran

Karam Nazari, Raheleh Kardel and Manoochehr Babanezhad

- 2. A Bayesian Approach to Inferring the Contribution of Unobserved Ground Conditions to Observed Scores in Sports: The Example of Cricket Scott R. Brooker and Seamus Hogan
- 3. Mendelian Randomisation using Instrumental Variable Magid Maatallah
- 4. Individual Prediction Mathematical Models of Motor Activity Development of Children with the Cerebral Paralysis

 Alexander Wildemann, Anatoly Tashkinov and Vladimir Bronnikov

9.10–10.30 **Statistical Applications III** (Hall 2)

Chair: Simona Korenjak-Černe

- 1. Hierarchical Clustering of Population Pyramids Presented as Histogram Symbolic Data Nataša Kejžar, Simona Korenjak-Černe and Vladimir Batagelj
- 2. The Survey Study about the Lifestyle of Young Generations in Thailand Vacharaporn Suriya-bhivadh
- 3. Numerical Realization Nonlinear Regressions Dependences Lyumkis Victor
- 4. Applications of Heavy Tailed Distributions for Modeling Human Behavior and Activities in Cyber Space

Mohammad Ali Baradaran Ghahfarokhi, Parvin Baradaran Ghahfarokhi and Rahim Bahramian Dehkordi

10.30-10.50 **Break**

10.50–11.50 **Statistical Applications IV** (Hall 1)

Chair: Gaj Vidmar

- 1. **Control Charts For Weibull, Gamma and Lognormal Distributions** Derya Çalışkan and Canan Hamurkaroglu
- 2. Statistical Modulation of a Human Health Problem in Albania Luela Prifti, Etleva Beliu and Shpetim Shehu
- 3. Application of Stochastic Ornstein-Uhlenbeck Equation to Economics Tijana Levajković and Jelena Stanojević

10.50–11.50 **Modeling and Simulation III** (Hall 2)

1. Method of Successive Approximations in Elastic Boundary Value Problem for Composite Materials with Stochastic Structure
Mikhail Tashkinov and Valeriy Wildemann

- 2. Non-linear Dimensionality Reduction for Functional Computer Code Modeling Benjamin Auder
- 3. A Comparison of the Most Commonly Used Measures of Association for Doubly Non-Squared Ordered Contingency Tables Via Simulation Öznur İşçi and Atilla Göktaş

12.00–12.20 Closing of the conference (Hall 1)

12.30-14.00 Lunch

14.00–18.00 **Workshop** (Hall 1)

1. **Practical Applications of Permutation Tests** *Phillip Good*

Chair: Giovanni Millo