17TH ANNUAL MEETING OF THE BELGIAN STATISTICAL SOCIETY

Lommel, (14) 15-16 October 2009

The preliminary program of the next meeting of the Belgian Statistical Society (BSS 2009) is now available on the conference web-site: http://www.sbs-bvs.be/

Wednesday 14th October (Young Statisticians Afternoon)

13h30Registration and welcome

14h00Contributed talks young statisticians

- Gordon Gudendorf (U.C.Louvain) Nonparametric estimation of multivariate extreme value copulas
- Koen Mahieu (K.U.Leuven) Maxbias Curves for Multivariate Regression Estimators
- Girma Minalu (U.Hasselt) Estimating the impact of school closure on social mixing behavior and the transmission of close contact infections in eight European countries

15h00Presentations Quetelet price winners

- Bernard Francq (U.C. Louvain) *TBA*
- Dan Lin (U. Hasselt) Testing Procedures on Comparisons of Several Treatments with one Control in a Microarray Setting
- Andrea Kvitkovičová (Charles University in Prague) Changepoint fractional polynomials in modelling the seroprevalence data
- Elke Moons (U. Hasselt) *TBA*

- Veronique Storme (U.Gent) Integration of Transcriptomics and Metabolomics for understanding Lignin Biosynthesis

16h00Break

16h20Contributed talks young statisticians

- Jonathan Jaeger (U.C.Louvain) Functional estimation in systems defined by differential equation using Bayesian smoothing methods
- Christel Ruwet (U.Liège) Detection of influential observations on the error rate based on the generalized k-means clustering procedure

17h00Quiz

18h00Dinner

Thursday, 15th October

8h30 Registration

9h30 Welcome and Opening of the meeting.

9h40 Invited talk by Prof. Anthony Davison (EPFL, Lausanne) *Modelling spatial extreme values*.

10h30Break and Posters

10h50Contributed talks

Quetelet

- Jan de Neve (U.Gent) A semiparametric unified approach for the detection of differential gene expression in microarrays.
- Emanuele Del Fava (U.Hasselt) *The co-infection between HCV and HIV: A joint modelling approach.*
- Tatsiana Khamiakova (U.Hasselt) Gene filtering of microarray experiments with a complex design.
- Forcheh Chiara Anyiawung (K.U.L.) A novel approach for exploring functional relationships in gene expression data.

Methodology

- Herbert Thijs (U.Hasselt) The future of missing data.
- Roula Tsonaka (K.U.L.) A goodness-of-fit test for the random effects distribution in mixed models.
- Olga Reznikova (U.C.L.) On the estimation of the dynamic conditional correlation models.
- Teh Amouh (F.U.N.D.P.Namur) Stratified aggregation rule for multiple classifier systems.

12h10Lunch and Posters

14h00Quetelet invited talk by Prof. Dimitris Rizopoulos (Erasmus University Rotterdam)

Challenges in joint modelling of longitudinal and time-to-event data.

14h50Contributed talks

Biostatistics

- Réjane Rousseau (U.C.L.) Combination of Independent Component Analysis and statistical modelling for the identification of metabonomic biomarkers in 1H-NMR spectroscopy.
- Qi Zhu (U.Hasselt) A Bayesian approach to modeling of the enzymatically 18O-labeled mass spectra.
- Lixin Zhang (U.Liège) Revisiting the multivariate coefficient of variation for comparing electrophoretic techniques in External Quality Assessment (EQA) schemes.

Methodology

- Ilaria Prosdocimi (K.U.L.) Analyzing Italian induced abortion data with extended generalized additive models.
- Géraldine Laurent (U.Liège) Estimation of the error distribution in right censored and selection biased regression models.
- Jan Johannes (U.C.L.) Global and local minimax-optimal estimation in functional linear model.

15h50Break and Posters

16h20Contributed talks

Biostatistics

- Geert Molenberghs (U.Hasselt) On the identifiability of the incomplete-data models and random-effects.
- Teshome Birhanu (U.Hasselt) *Pseudo-likelihood estimation for incomplete data.*

<u>Methodology</u>

- Michiel Debruyne (U.Antwerpen) An outlier map for support vector machine classification.

- Arnout Van Messem (V.U.B.) Consistency and robustness properties of SVMs for heavy-tailed distributions.

17h00Invited talk by Prof. Marc Hallin (U.L.B.)

Multivariate quantiles and statistical depth: from L1 optimization to halfspace contours.

17h50Break

18h00General assembly of the Belgian Statistical Society

19h00Dinner

Friday, 16th October

9h00 IAP invited talk by Prof. Alois Kneip (University of Bonn) *Functional linear regression*.

9h50 Contributed talks

Biostatistics

- Aysun C, etiny urek Yavuz (U.Liège) A flexible Cox proportional hazards model for interval-censored data using Bayesian P-splines with an extension to frailty model.
- Bart Van Rompaye (U.Gent) Analyzing competing risks survival data faced with misclassified causes-of-death.
- Jan Ramon (K.U.L.) Handling missing values and censored data in PCA of pharmacological matrices.

B-ENBIS

- Vishva M. Danthurebandara (K.U.L.) *Effect of choice complexity on design efficiency in conjoint choice experiments.*

- Bagus Sartono (U.Antwerpen) A new method for the orthogonal blocking of strength-three orthogonal arrays.
- Christian Ritter (U.C.L.) Introducing R2wd and R2PPT, two R packages to create Word documents and Powerpoint presentations from R.

10h50 Break and Posters

11h20 Contributed talks

Quetelet

- Kristof De Beuf (U.Gent) Analysis of tiling array data using wavelet-based functional mixed models.
- Amparo Yovanna Castro (U.Hasselt) The estimation of the force of infection for HCV among injecting drug users (IDU's) using interval censored data.

Methodology

- Tim Verdonck (U.Antwerpen) A deterministic algorithm for the MCD estimator.
- Stephan Van der Veeken (K.U.L) Robust transformation to symmetry: a maximum trimmed likelihood approach.

12h00Biostatistics invited talk by Prof. Marta Fiocco (Leiden University Medical Center)

A new multivariate gamma distribution and its implication for the Poisson correlated gamma frailty model.

12h50Closing

13h00 Lunch

Posters

Abdelkamel Alj (U.L.B.) The exact quasi-likelihood of time dependent VARMA Models

Tom Cattaert (U. Liège) Selecting multiple epistatic models using MB-MDR

Lieven De Clercq (K.U.L.) TBA

Auguste Gaddah (U. Hasselt) A flexible Koziol-Green model

Arthur Gitome (U. Hasselt) Resampling based multiple testing in microarray experiments: permutations or bootstrap?

Nele Goeyvaerts (U. Hasselt) Statistical Inference on Parvovirus B19 immunology using data on social contacts and serological status

Maarten Jansen (K.U.L.) Multiscale kernel smoothing using a lifting scheme

Christophe Ley (U.L.B.) On the singularity of Fisher information in skewsymmetric density estimation

Harrison Machiaria (U. Antwerpen) *Equivalent-estimation versus D-optimal* second-order split-plot designs

Setia Pramana (U. Hasselt) Order restricted semi-parametric inference for testing dose-response relationship in pre-clinical microarray experiments

Maik Schwarz (U.C.L.) Consistent density deconvolution under partially known error distribution

Christelle Senterre (U.L.B.) The contribution of biostatistics to the epidemiologic study of injuries

Leen Slaets (K.U.L.) Clustering based on multiresolution time warping

Kukatharmini Tharmaratnam (KUL) A model selection strategy for regression models based on robust estimators

Pushpike Thilakarathne (KUL) The use of mixed models to identify differentially expressed genes when a single replicate per biological condition is present

Catherine Timmermans (U.C.L.) Measuring dissimilarities between time series using their unbalanced Haar wavelets expansion

Dina Vanpaemel (K.U.L.) Detecting influential data points in extreme value statistics