

Programme

June 26, Sunday

16.00-20.00 Registration J. Liivi 2, foyer

June 27, Monday

8.00-9.00 Registration J. Liivi 2, foyer

9.05-9.20 **Opening.** Room 111

9.20-11.00 **Session 1.**

Chair: Ene-Margit Tiit. Room 111

9.20-10.20 Keynote Lecture – Tartu 11. I. Olkin: Life distributions in survival analysis and reliability: Structure of semiparametric families

10.20- 11.00 Invited Lecture – Tartu 11. A. Azzalini: On estimation problems for multivariate skew-symmetric distributions

11.00-11.20 Coffee Break

11.20-13.00 **Session 2.**

Chair: George P. H. Styan. Room 111

11.20-12.00 Invited Lecture – IWMS. J. Volaufova: Estimability and restrictions in linear models.

12.00-12.40 Invited Lecture – IWMS. A. Markiewicz: Spectral properties of information matrices and design optimality.

12.40-13.00 E. Ahmed: Estimating regression parameters: A mosaic of estimation strategies.

13.00-14.30 Lunch

14.30-16.10 **Session 3A. High-dimensional analysis.** Contributed papers.

Chair: Muni. S. Srivastava. Room 111

14.30-14.50 D. Adolf, S. Kropf: Block-wise permutation tests for correlated multivariate Imaging data.

14.50-15.10 S. Kropf, G.-C. Ding, H. Heuer, K. Smalla: A modified principle component test for high-dimensional data

15.10-15.30 M. R. Ahmad, M. Ohlson, D. von Rosen: Some tests for covariance matrices with large dimension.

15.30-15.50 J. Pielaszkiewicz, M. Ohlson, D. von Rosen: Asymptotics for the normalized spectral function

15.50-16.10 Coffee Break

14.30-16.10 **Session 3B. Applications in transport.** Contributed papers.

Chair: Kalev Pärna. Room 405

14.30-14.50 A. Andronov: Maximum likelihood estimates for Markov-additive processes of arrivals by aggregated data

14.50-15.10 M. Hauka, Y. Paramonov: Minimax decision for solution of the problem of aircraft and airline reliability processing results of acceptance full-scale fatigue test of airframe.

15.10-15.30 I. Foox, I. Glukhova, G. Koshkin: Semi-recursive nonparametric of identification and control.

15.30-15.50 N. Medvedev, P. Panfilov: Methods and algorithms for estimation of statistical characteristics of the MPLS network

15.50-16.10 Coffee Break

16.10- 17.30 **Session 4. Distribution theory.** Contributed papers,

Chair: Tõnu Kollo. Room 111,

16.10-16.30 R. A. Arellano-Valle, W.-D. Richter: On skewed $l_{n,p}$ -symmetric distributions

16.30-16.50 C. M. Cuadras, W. Diaz: Another generalization of bivariate FMG distributions.

16.50-17.10 H. Ogasawara: Cornish-Fisher expansions using sample cumulants and monotonic transformations.

17.10-17.30 M. Pihlak: Using Edgeworth expansion approximating two- and three-dimensional probability distribution functions.

17.45-19. 15 **Guided walking tour in Tartu**

20.00-22.00 **Welcome Reception**

June 28, Tuesday

9.00-10.40 **Session 5.**

Chair: N. Balakrishnan. Room 111

9.00- 10.00 Keynote Lecture – IWMS. I. Olkin: Majorization and its applications.

10.00-10.40. Invited Lecture – Tartu11. M. Greenacre: Biplot videos.

10.40-11.00 Coffee Break

11.00-12.40 **Session 6.**

Chair: Adelchi Azzalini. Room 111

11.00-12.00 **Samuel Kotz Memorial Lecture.** N. Balakrishnan: On Pearson-Kotz Dirichlet distributions.

12.00-12.40. Invited Lecture – Tartu 11. B. Jørgensen: Multivariate exponential dispersion models.

12.40-14.10 Lunch

14.10-16.30 **Session 7. Muni S. Srivastava 75 jubilee Session.**

Chair: Dietrich von Rosen. Room 111

14.10-14.30 T. Kollo: Life in statistics – Muni S. Srivastava 75

14.30-15.10 M. S. Srivastava: A two sample test in high dimension with fewer observations.

15.10-15.30 D. von Rosen: Multivariate linear models and profile analysis.

15.30-15.50 E. Glimm: Multivariate and multiple testing of hypothesis – what is preferred in the analysis of clinical trial data and why?

15.50-16.10 H. Yanagihara: A comparison of three estimators in GMANOVA model when the sample size is fewer than the dimension.

16.10-16.30 M. Ohlson: Profile analysis for a Growth Curve model

16.30-17.00 Coffee Break

17.00-17.40 **Session 8.** Contributed papers.

Chair: Hans. J. Werner. Room 111.

17.00-17.20 A. Dolati: Measures of conditional asymmetry.

17.20-17.40 M. R. Özkale: On the performance of the restricted estimators.

June 29, Wednesday

9.00-10.40 **Session 9A. Classification methods.** Contributed papers.

Chair: Alfredas Račkauskas. Room 111.

9.00-9.20 K. Dučinskas, L. Dreišienė: Optimal classification of the multivariate GRF observations.

9.20-9.40 R. Kangro, K. Pärna: K-nearest neighbors as pricing tool in insurance.

9.40-10.00 A. Lee, B. Willcox: Generalizations of Ward's method, or, norms and netball – what's the connection?

10.00-10.20 S. Nagy: Depth-based classification for functional data

10.20-10.40 N. Chichvarin, I. Chichvarin: Combined method which includes statistical and heuristic approaches in object recognition.

10.40-11.00 Coffee Break

9.00-10.40 **Session 9B. Applications in finance and insurance.** Contributed papers.

Chair: Remigijus Leipus. Room 405.

9.00-9.20 M. Käärik, H. Kadarik: Limited expected value function and its applications in insurance mathematics.

9.20- 9.40 A. Žegulova, M. Käärik: On estimation of loss distributions and risk measures.

9.40-10.00 M. Lira Vidrio: Non-linearity in the returns of the Colombian coffee prices.

10.00-10.20: D. Teneng: NIG Lévy process in asset price modelling: Case of Estonian companies.

10.20-10.40 D. Filatova: Estimating the time-varying parameters of stochastic differential equation by maximum principle in finance tasks.

10.40-11.00 Coffee Break

11.00-12.40 **Session 10A.** Contributed talks – IWMS.

Chair: Simo Puntanen. Room 111.

11.00-11.20 F. Carvalho, J. T. Mexia: Error orthogonal models and commutative orthogonal block structure: Equivalence.

11.20-11.40 J. T. Mexia: Structured families of models with commutative orthogonal block structure.

11.40-12.00 H. J. Werner: Some results related to the general Gauss-Markov model – weak complementarity, non-testability and missing observations.

12.00-12.20 J. Hunter: Markov chain properties in terms of column sums of the transition matrix.

12.20-12.40 K. Filipiak: On the E-optimality of complete designs under a mixed interference model.

11.00-12.40 **Session 10B.** Contributed papers.

Chair: Jüri Lember. Room 405.

11.00-11.20 R. Leipus: Memory properties of aggregated autoregressive processes and fields.

11.20-11.40 A. Račkauskas, C. Suquet: Multivariate models with space varying memory.

11.40-12.00 A. Malyarenko: Statistical analysis of cosmic microwave background data.

12.00-12.20 A. V. Kitaeva, M. V. Kolupaev: Recursive kernel estimators of a non-homogeneous Poisson process normalized intensity function and its derivative.

12.20-12.40 Y. Khusanbaev, G. Rakhimov: The asymptotic results for nearly critical branching processes with immigration.

12.40 -14.00 Lunch

14.00-20.00 Excursion(s)

June 30, Thursday

9.00-11.00 Session 11. Sampling theory

Chair: Imbi Traat. Room 111

9.00-9.40 Invited Lecture – B. Sinha: Privacy protection and quantile estimation under noise multiplication.

9.40-10.00 Y. K. Belyaev: Analysis of contingent valuation data with self-selected rounded WTP-intervals collected by two-steps sampling plans.

10.00-10.20 N. Lepik: Estimation under restrictions built upon biased initial estimators.

10.20-10.40 P. E. Oliveira: Polynomial smoothing of discrete sparsely observed distribution

10.40-11.00 Coffee Break

11.00-13.00 Session 12. Linear models. Contributed papers.

Chair: Bimal Sinha. Room 111.

11.00-11.20 A. Kaasik: Residuals of a linear model for correlated data with measurement errors.

11.20-11.40 E. P. Liski, A. Liski: A comparison of least squares model averaging estimators.

11.40-12.00 S. Pynnonen: Distribution of an arbitrary linear transformation of internally Studentized residuals of multivariate regression with elliptical errors.

12.00-12.20 L. R. LaMotte: Estimability and restrictions in linear models.

12.20-12.40 B. Schaffrin, S. Uzun: On the reliability of Errors-in-Variables models.

12.40-13.00 E. Chimitova, N. Galanova: Testing goodness-of-fit with parametric ATF model.

13.00-14.30 Lunch

14.30-16.30 Session 13A. General linear models.

Chair: Bent Jørgensen. Room 111.

14.30-14.50 D. Klein, I. Žežula: Simultaneous confidence region for ρ and σ^2 in the Growth Curve model with uniform correlation structure.

14.50-15.10 Y. Liang, T. von Rosen, D. von Rosen: Combined permutation invariant covariance matrix and estimation in multilevel models.

15.10-15.30 J. Nzabanita, M. Ohlson, D. von Rosen: Estimation of parameters in the extended Growth Curve model with linearly structured covariance matrix.

15.30-15.50 J. Wei, Y. Li, D. von Rosen: A Study on the distribution of the residual in the Growth Curve model.

15.50-16.10 P. A. Kashitsyn: Multivariate model with a Kronecker product covariance structure: A general linear model.

16.10-16.30 Coffee Break

16.30-18.10 Session 13B. Applications in life sciences.

Chair: Krista Fischer. Room 405.

14.30-14.50 J. K. Filus, L. Z. Filus: Construction of bivariate survival probability functions related to 'micro-shocks' – 'micro-damages' paradigm.

14.50-15.10 J. Graffelman: On the canonical correlation analysis of bi-allelic genetic markers.

15.10-15.30 T. von Rosen, M. Valge, T. Võrno, E. Käärik: On the identification of sets of informative peptides on antigen microarrays

15.30-15.50 M. Vähi: Stochastic forecast of the population using models for fertility and mortality.

16.10-16.30 Coffee Break

16.30-17.30 Session 17. IWMS and History.

Chair: Jeffrey Hunter. Room 111

16.30-17.00 S. Puntanen: Twenty times IWMS: A short history.

17.00-17.30 G.P.H. Styan: Caïssan squares: The magic of chess.

19.00-22.00 **Conference Dinner** (Restaurant Atlantis, Narva mnt. 2)

July 1, Friday

Departure