

# Programme Schedule

## Sunday, June 26th

16.00–20.00 Registration

## Monday, June 27th

8.00-9.00 Registration

9.05-9.20 Opening

9.20-13.00 Sessions 1, 2

13.00-14.30 Lunch

14.30-17.30 Sessions 3A, 3B, 4

17.45-19.15 Guided walking tour in Tartu

20.00-22.00 Welcome Reception

## Tuesday, June 28th

9.00-12.40 Sessions 5, 6

12.40-14.10 Lunch

14.10-17.10 Session 7

## Wednesday, June 29th

9.00-12.40 Sessions 8A, 8B, 9A, 9B

12.40-14.00 Lunch

14.00-20.00 Excursion(s)

## Thursday, June 30th

9.00-13.00 Sessions 10, 11

13.00-14.30 Lunch

14.30-17.30 Sessions 12A, 12B, 13

19.00-22.00 Conference Dinner

## Friday, July 1st

Departure

# Conference Programme

## Sunday, June 26th

16.00–20.00 **Registration.** J. Liivi 2, foyer

## Monday, June 27th

8.00–09.00 **Registration.** J. Liivi 2, foyer

9.05–09.20 **Opening.** Room 111

### Session 1

**Room 111:** Chair Ene-Margit Tiit

9.20-10.20 Keynote Lecture

*I. Olkin:* Life distributions in survival analysis and reliability:  
Structure of semiparametric families

10.20-11.00 Invited Lecture

*A. Azzalini:* On estimation problems for multivariate skew-symmetric distributions

11.00–11.20 **Coffee break**

### Session 2

**Room 111:** Chair Imbi Traat

11.20-12.00 Invited Lecture

*B. Sinha:* Privacy protection and quantile estimation under noise multiplications

12.00–12.20 *Y. K. Belyaev:* Analysis of contingent valuation data with self-selected rounded WTP-intervals collected by two-steps sampling plans

12.20–12.40 *N. Lepik:* Estimation under restrictions built upon biased initial estimators

12.40–13.00 *P. E. Oliveira:* Polynomial smoothing of discrete sparsely observed distribution

13.00–14.30 **Lunch**

### Session 3A. High-dimensional analysis

**Room 111:** Chair Muni S. Srivastava

- 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 principal 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

### Session 3B. Applications in transport

**Room 405:** Chair Kalev Pärna

- 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 algorithms 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**

### Session 4. Distribution theory

**Room 111:** Chair Tõnu Kollo

- 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** (from J. Liivi 2)
- 20.00–22.00 **Welcome Reception**. Museum of History of UT, Lossi 25

## Tuesday, June 28th

### Session 5

**Room 111:** Chair Bent Jørgensen

- 9.00-10.00 Keynote Lecture  
*I. Olkin:* Majorization and its applications
- 10.00-10.40 Invited Lecture  
*M. Greenacre:* Biplot videos
- 10.40-11.00 **Coffee break**

### Session 6

**Room 111:** Chair Adelchi Azzalini

- 11.00-12.00 **Samuel Kotz Memorial Lecture**  
*N. Balakrishnan:* On Pearson-Kotz Dirichlet distributions
- 12.00-12.40 Invited Lecture  
*B. Jørgensen:* Multivariate exponential dispersion models
- 12.40-14.10 **Lunch**

### Session 7. Muni S. Srivastava 75 jubilee Session

**Room 111:** Chair Dietrich von Rosen

- 14.10-14.30 *T. Kollo:* Life in statistics - Muni S. Srivastava 75
- 14.30-15.10 Invited Lecture  
*M. S. Srivastava:* A two sample test in high dimension with fewer observations
- 15.10-15.40 *D. von Rosen:* Multivariate linear models and profile analysis
- 15.40-16.10 *H. Yanagihara:* A comparison of three estimators in GMANOVA model when the sample size is fewer than the dimension
- 16.10-16.30 **Coffee break**
- 16.30-16.50 *E. Glimm:* Multivariate and multiple testing of hypothesis - what is preferred in the analysis of clinical trial data and why?
- 16.50-17.10 *M. Ohlson:* Profile analysis for a Growth Curve model

## Wednesday, June 29th

### Session 8A. Classification methods

**Room 111:** Chair Alfredas Račkauskas

- 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. J. 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

### Session 8B. Applications in finance and insurance

**Room 405:** Chair Remigijus Leipus

- 9.00-9.20 *M. Käärrik, H. Kadarik:* Limited expected value function and its applications in insurance mathematics
- 9.20-9.40 *A. Žegulova, M. Käärrik:* 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**

## Session 9A

**Room 111:** Chair Simo Puntanen

- 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. J. Hunter:* Markov chain properties in terms of column sums of the transition matrix
- 12.20-12.40 *S. E. Ahmed:* Estimating regression parameters: A mosaic of estimation strategies

## Session 9B

**Room 405:** Chair Jüri Lember

- 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 *M. R. Özkale:* On the performance of the restricted estimators
- 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)**

## Thursday, June 30th

### Session 10

**Room 111:** Chair George P. H. Styan

9.00-9.40 Invited Lecture

*J. Volaufova:* On exact testing problems in linear models with two variance-covariance components

9.40-10.20 Invited Lecture

*A. Markiewicz:* Spectral properties of information matrices and design optimality

10.20-10.40 *K. Filipiak:* On the E-optimality of complete designs under a mixed interference model

10.40-11.00 **Coffee break**

### Session 11. Linear models

**Room 111:** Chair Hans J. Werner

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. Pynnönen:* 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**

## Session 12A. General linear models

Room 111: Chair Augustyn Markiewicz

- 14.30-14.50 *D. Klein, I. Žežula*: Simultaneous confidence region for  $\rho$  and  $\sigma^2$  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

## Session 12B. Applications in life sciences

Room 405: Chair Krista Fischer

- 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. Käärrik*: 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**

## Session 13. IWMS and History

Room 111: Chair Jeffrey J. Hunter

- 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

## Friday, July 1st

Departure