# Conference Programme

## Monday, June 25th

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|---|---|
| 13.30–16.00 | Guided walking tour (from Hotel Viru, Tallinn) |
| 14.00–20.00 | Registration (J. Liivi 2, Tartu) |

## Tuesday, June 26th

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| 08.00–09.15 | Registration |
| 09.30–09.40 | Opening (Room 111) |

**Session 1**
**Room 111**: Chair Dietrich von Rosen

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|---|---|
| 09.40–10.40 | Keynote Lecture<br>*M. S. Srivastava*: Recent Advances and Trends in Multivariate Analysis |
| 10.40–11.10 | Invited Lecture<br>*M. Perlman*, *S. Chaudhuri*: Reversing the Stein Effect |
| 11.10–11.30 | Coffee break |

**Session 2**
**Room 111**: Chair Roger Nelsen

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|---|---|
| 11.30–12.00 | Invited Lecture<br>*N. Kolev*: Copula-Based Regression Models |
| 12.00–12.20 | *J. Nešlehová*, *A. J. McNeil*: Archimedean Copulas in High Dimensions |
| 12.20–12.40 | *J. Fortiana*, *A. Esteve*, *E. Boj*: Adaptive Metrics for Distance-Based Statistics |
| 12.40–13.00 | *A. Kolesárová*, *R. Mesiar*, *C. Sempi*: Copulæ and Measure-Preserving Transformations |
| 13.00–14.20 | Lunch break |

**Session 3**
**Room 111**: Chair Muni Srivastava

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|---|---|
| 14.20–15.20 | Keynote Lecture<br>*N. Balakrishnan*: A Skewed Look at Bivariate and Multivariate Order Statistics |
| 15.20–15.40 | *B. C. Arnold*: Flexible Univariate and Multivariate Models Based on Hidden Truncation |
| 15.40–16.00 | Coffee break |

**Session 4**
**Room 111**: Chair Tõnu Kollo

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|---|---|
| 16.00–16.30 | Invited Lecture<br>*P. E. Jupp*: Uniformity in directional statistics: data-driven tests and free-lunch learning |
| 16.30–17.00 | Invited Lecture<br>*S. Andersson*, *T. Klein*: Rietz- and Wishart Distribution Associated with a Decomposable Undirected Graph |
| 17.00–17.20 | *M. S. Srivastava*, *T. Nahtman*, *D. von Rosen*: Kronecker Product Covariance Structure in Multivariate Linear Models |
| 17.20–17.40 | *A. Kaasik*, *K. Pärna*: Approximating the Integrated Tail Distribution |
| 17.45–19.15 | Guided walking tour (from J. Liivi 2) |
| 20.00–22.00 | Welcome Reception (Lossi 25) |

## Wednesday, June 27th

**Session 5A**
**Room 405**: Chair Carles Cuadras

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|---|---|
| 09.00–09.20 | *F. Durante*, *E. P. Klement*, *J. J. Quesada-Molina*: Trivariate Copulas with Given Bivariate Marginals |
| 09.20–09.40 | *G. A. Fredricks*: A Conjecture of Bertino: from Copulas to Graph Theory |
| 09.40–10.00 | *E. Liebscher*: Modelling and Estimation of Multivariate Densities in a Copula-Based Model |
| 10.00–10.20 | *A. K. Nikoloulopoulos*, *D. Karlis*: Finite Normal Mixture Copula for Modelling Multivariate Discrete Data |

**Session 5B**
**Room 404**: Chair Mindaugas Bloznelis

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|---|---|
| 09.00–09.20 | *M. Käärik*, *K. Pärna*: On the Quality of $k$-Means Clustering Based on Grouped Data |
| 09.20–09.40 | *K. Dučinskas*: Discrimination of Equicorrelated Observations |
| 09.40–10.00 | *A. Chuprunov*, *L. Terekhova*: Almost Sure Versions of Limit Theorems for Random Sums |
| 10.20–10.50 | Coffee break |

**Session 6A**

**Room 405**: Chair Christian Genest

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|---|---|
| 10.50–11.10 | *C. M. Cuadras*: A Class of Power Series Copulas Constructed with Weighted Geometric Means |
| 11.10–11.30 | *J. J. Quesada-Molina*, *S. Saminger*, *C. Sempi*: Quasi-Copulas with Given Sub-Diagonal Sections |
| 11.30–11.50 | *S. Saminger*: On Constructions and Boundaries for some Type of 2-Increasing Functions |
| 11.50–12.10 | *G. Massonnet*, *P. Janssen*, *L. Duchateau*: Modeling Udder Data using Copula Models for Quadruples |
| 12.10–12.30 | *I. Koch*, *A. De Schepper*: The Comonotonicity Coefficient: a Multivariate Measure for Positive Dependence |

**Session 6B**

**Room 404**: Chair Kalev Pärna

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|---|---|
| 10.50–11.10 | *M. Bloznelis*: Large Clusters of Intersection Graphs |
| 11.10–11.30 | *A. Bakshaev*: Homogeneity and Goodness-of-Fit Tests on the Basis of N-distances |
| 11.30–11.50 | *S. Kropf*: Multivariate Tests Based on Pairwise Distance or Similarity Measures |
| 11.50–12.10 | *T. Varatnitskaya*: Estimating of Main Characteristics of Processes with Non-Regular Observations |
| 12.10–12.30 | *I. Belov*, *A. Kabašinskas*, *L. Sakalauskas*: Modeling of Financial Portfolio in Emerging Markets |

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| 12.30–14.00 | Lunch break |

**Session 7A**

**Room 405**: Chair Michael Perlman

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|---|---|
| 14.00–14.20 | *B. Fountain*, *A. Talebi*: "Weak" Stochastic Orderings and Dependence Measures |
| 14.20–14.40 | *J. Mielniczuk*, *W. B. Wu*: On some Measures of Strength of Dependence Based on Coupling |
| 14.40–15.00 | *G. A. Fredricks*, *R. B. Nelsen*: On the Relationship between Spearman's Rho and Kendall's Tau for Continuous Random Variables |
| 15.00–15.20 | *N. Kolev*, *M. Goncalves*, *B. Dimitrov*: Probabilistic Properties of Sibuya's Dependence Function |

**Session 7B**

**Room 404**: Chair Lennart Bondesson

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|---|---|
| 14.00–14.20 | *A. Andronov*: On Nonparametric Interval Estimation of a Regression Function Based on the Resampling |
| 14.20–14.40 | *E. P. Liski*: A Data-Driven Lack-of-Fit Test of Regression Functions |
| 14.40–15.00 | *S. Puntanen*: Decomposing the Efficiency of the Ordinary Least Squares Estimator in a Linear Regression Model |
| 15.00–15.20 | *E. Käärik*: Modelling Dropouts by Conditional Distribution, a Copula-Based Approach |

15.20–15.50 Coffee break

**Session 8A**

**Room 405**: Chair Jürgen Läuter

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|---|---|
| 15.50–16.10 | *N. Lepik*, *K. Sõstra*, *I. Traat*: Conditional Restriction Estimator for Domains |
| 16.10–16.30 | *G. Rönning*: Linear Models with Measurement Errors Arising from Mixture Distributions |
| 16.30–16.50 | *M. Juhkam*, *K. Pärna*: Sampling From Populations With Large Number of Classes |
| 16.50–17.10 | *J. Aru*: Estimation of Covariance Matrix under Informative Sampling |
| 17.10–17.30 | *M. Tretyakova*: Recognition of Extreme Events Based on Heterogeneous Multidimensional Time Series |

**Session 8B**

**Room 404**: Chair Jüri Lember

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|---|---|
| 15.50–16.10 | *J. Grala-Michalak*, *A. Michalak*: On Representations of Stochasic Processes by Radon Measures on $D(0,1)$ |
| 16.10–16.30 | *Z. Fabián*: Johnson Mutual Information and Its Use in Multivariate Problems and Time-Series Analysis |
| 16.30–16.50 | *A. Zeifman*: Asymptotic Bounds of the Rate of Convergence for some Stochastic Models |
| 16.50–17.10 | *D. Surgailis*, *G. Teyssière*, *M. Vaičiulis*: The Increment Ratio Test for Long Memory |
| 17.10–17.30 | *P. Lachout*: Estimation Process, Consistency |

## Thursday, June 28th

**Session 9**
**Room 111**: Chair Nikolai Kolev

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|---|---|
| 09.00–09.30 | Invited Lecture<br>*C. Genest*, *J. Nešlehová*: Modeling Count Data with Copulas: Should We? |
| 09.30–09.50 | *R. B. Nelsen*, *J. J. Quesada-Molina*, *J. A. Rodríguez-Lallena*, *M. Úbeda-Flores*: Quasi-Copulas and Signed Measures |
| 09.50–10.10 | *J. A. Rodríguez-Lallena*: Properties of a New Class of Bivariate Copulas |
| 10.10–10.30 | *V. E. Piperigou*: Discrete Disributions in the Extended FGM Family: the P.G.F. Approach |
| 10.30–10.50 | Coffee break |

**Session 10**
**Room 111**: Chair Steen Andersson

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|---|---|
| 10.50–11.20 | Invited Lecture<br>*L. Bondesson*: On Univariate and Bivariate Generalized Gamma Convolutions |
| 11.20–11.40 | *A. Koloydenko*: A Hidden Polyhedral Markov Model for Diffusion MRI |
| 11.40–12.00 | *J. Lember*, *A. Koloydenko*, *M. Käärik*: Infinite Viterbi Alignment: Properties and Applications |
| 12.00–12.20 | *J. Lember*, *H. Matzinger*: On the Variance and Uniqueness of Longest Common Subsequence |
| 12.20–13.45 | Lunch break |
| 13.45–20.00 | Excursion(s) (from J. Liivi 2) |

## Friday, June 29th

**Session 11A**
**Room 405**: Chair Peter Jupp

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|---|---|
| 09.00–09.20 | *M. Ohlson*, *T. Koski*: More on Distributions of Quadratic Forms |
| 09.20–09.40 | *T. Kollo*: Multivariate skewness and kurtosis of a random vector |
| 09.40–10.00 | *H. Kilgi*: Shifted Multivariate Laplace Distribution |
| 10.00–10.20 | *L. A. Zolotukhina*, *I. V. Zolotukhin*: Some Characteristics of Generalized Multivariate Laplace Distribution |

**Session 11B**
**Room 404**: Chair Siegfried Kropf

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|---|---|
| 09.00–09.20 | *J. Läuter*, *E. Glimm*: Testing the Relevance of Selected Variables - a New Approach to Multivariate Testing Problems |
| 09.20–09.40 | *E. Glimm*: Testing Treatment Combinations versus the Corresponding Monotherapies |
| 09.40–10.00 | *T. Nahtman*: Linear Mixed Models for the Analysis of Peptide Epitope Microarray Data |
| 10.00–10.20 | *M. Möls*, *K. Fischer*, *A. Uusküla*, *H. Kilgi*: Generalized Linear Mixed Models to Analyse Data from Respondent-Driven Sampling |
| 10.20–10.40 | Coffee break |

**Session 12A**
**Room 405**: Chair Barry Arnold

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|---|---|
| 10.40–11.00 | *H. Drygas*: QR-Decomposition from the Statistical Point of View |
| 11.00–11.20 | *A. Kharin*, *P. Shlyk*: Multivariate Robust Bayesian Forecasting under Functional Distortions in the $t$ Metric |
| 11.20–11.40 | *I. V. Zolotukhin*, *L. A. Zolotukhina*: Method of Iterative-Orthogonal Regression for Calculation of Robust Estimates in Confluence Analysis Scheme |
| 11.40–12.00 | *M. Pihlak*: Approximation of Multivariate Distribution Functions |
| 12.00–12.20 | *M. Radavičius*, *T. Rekašius*: Modeling Noise in Genetic Sequences |

**Session 12B**
**Room 404**: Chair Alexander Andronov

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|---|---|
| 10.40–11.00 | *M. Radavičius*, *J. Židanavičiūtė*: Analysis of Sparse Contingency Tables with Applications |
| 11.00–11.20 | *M. Vähi*, *E.-M. Tiit*: Using Multivariate Statistics to Describe the Demographic Behaviour of Europeans |
| 11.20–11.40 | *D. Santalova*: Single Index Model for Railway Passenger Conveyances Forecasting in Regions of Latvia |
| 11.40–12.00 | *C. Zhukovskaya*: Use of Generalized Linear Model in Forecasting of Air Passengers' Conveyances From EU Countries |
| 12.00–12.20 | *M. Radavičius*, *G. Jakimauskas*, *J. Sušinskas*: Clustering and Testing in High-Dimensional Data |
| 12.20–13.50 | Lunch break |

**Session 13**

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

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|---|---|
| 13.50–14.20 | Invited Lecture<br>*L. Rüschendorf*: Stochastic Ordering and Risk Measures for Portfolio Vector |
| 14.20–14.40 | *P. Embrechts*, *G. Puccetti*: Bounds for Functions of Multivariate Risks |
| 14.40–15.00 | *I. Žežula*: On Multivariate Gaussian Copulas |
| 15.00–15.20 | *A. Sepp*: Dynamic Correlation Models for Credit Portfolios |
| 15.20–15.40 | Coffee break |

**Session 14**

**Room 111**: Chair Ludger Rüschendorf

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|---|---|
| 15.40–16.00 | *T. Tamkivi*, *T. Kollo*: Modeling Dependence of Daily Stock Prices and Making Predictions of Future Movements |
| 16.00–16.20 | *S. Staleuskaya*: Optimal Portfolio Investment by Kelly Criterion |
| 16.20–16.40 | *A. Čuvak*, *Z. Kalinauskas*: Application of Multiple Regression Models for Lithuanian Inflation |
| 19.00–22.00 | Conference Dinner (Narva mnt. 2) |