

Scientific Programme

Monday, August 24

08:00 **Registration**

09:00 - 09:10 **Opening**

Plenary Session

Chair: Dietrich von Rosen

09:10 - 09:55 **Jianfeng Yao**
Deviation tests for a high-dimensional mean

09:55 - 10:10 **Refreshment**

Session: Projection Pursuit

Chair: Tomer Shushi

10:10 - 10:40 **Andriette Bekker**
Modeling incomplete compositional datasets

10:40 - 11:10 **Jaakko Pere**
On nonstationary subspace analysis for multivariate random fields

11:10 - 11:30 **Marco Morosin**
Modeling high-dimensional data with a multivariate Bernoulli distribution

11:30 - 11:50 **Perttu Saarela**
Stationary subspace analysis for spatial data

11:50 - 12:20 **Coffee Break**

Session: New Trends in Robust Statistical Analysis - theory and application

Chair: Agnieszka Wyłomańska

12:20 - 12:50 **Michał Balcerek**
When switching fractional Brownian motion becomes non-Gaussian

12:50 - 13:20 **Marcin Pitera**
Coherent estimation of risk measures

13:20 - 13:50 **Joanna Janczura**
Kernel-based probabilistic path forecasting for electricity prices: empirical kernel calibration, scenario selection and dynamic forecast updating

14:00 **Lunch**

Plenary Session

Chair: Thomas Mathew

15:00 - 15:45 **Werner Müller**
Green LIME: Improving AI explainability through design of experiments

15:45 - 16:15 **Coffee Break**

Session: Experimental Design

Chair: Maryna Prus

16:15 - 16:40 **Nadja Malevich**
Estimation and design strategies for inter-individual differences in an overparameterized paired comparison model

16:40 - 17:00 **Małgorzata Graczyk**
Selected properties of estimators in the model of weighing design

17:00 - 17:20 **Stephan Bark**
A Bayesian updating framework for long-term multi-environment trial data in plant breeding

17:20 - 17:45 **Maryna Prus**
Optimal allocation of trials to sub-regions in multi-environment crop variety testing

17:45 - 17:50 **Refreshment**

Session: Inference for Non-Gaussian Distributions in Linear Models

Chair: Krzysztof Podgórski

17:50 - 18:20 **Farrukh Javed**
A class of continuous-time Gaussian mean-variance mixture state-space models

18:20 - 18:40 **Yuli Liang**
Testing patterned covariance matrices under quadratic subspace

18:40 - 19:00 **Jolanta Pielaszkiewicz**
Covariance structure approximation under high-dimensionality with the use of improved Kullback-Leibler divergence

19:00 **Welcome Reception**

Scientific Programme

Tuesday, August 25

Plenary Session

Chair: Ivan Žežula

09:00 - 09:45 **Syed Ejaz Ahmed**
Smart estimation in high-dimensional sparse settings

09:45 - 10:00 **Refreshment**

Session: New Trends in Robust Statistical Analysis - theory and application

Chair: Agnieszka Wyłomańska

10:00 - 10:30 **Wojciech Żuławiński**
Fractional lower-order covariance-based measures for cyclostationary time series with heavy-tailed distributions: application to dependence testing and model order identification

10:30 - 11:00 **Marek Arendarczyk**
The Greenwood statistic

11:00 - 11:20 **Katarzyna Skowronek**
The modified p -Greenwood statistic and its application to distinguishing Gaussian and near-Gaussian distributions - platykurtic and leptokurtic cases

11:20 - 11:40 **Kamil Kołodziejwski**
Estimation methods of matrix-valued autoregressive model

11:40 - 12:10 **Coffee Break**

Session: Machine Learning and Statistical Inference

Chair: Tomasz Górecki

12:10 - 12:30 **Johannes Forkman**
Matrix reduced-rank approximation through cross-validation

12:30 - 13:00 **Wojciech Rejchel**
Positive unlabeled data and prior shift estimation

13:00 - 13:30 **Łukasz Smaga**
Testing in matched-pairs functional data with missingness in one arm

13:30 - 14:00 **Piotr Sulewski**
Very simple and relatively precise mapping of the normal quantile function intended to generate normal pseudo-random numbers fastly

14:00 **Lunch**

Plenary Session

Chair: Werner Müller

15:00 - 15:45 **Thomas Mathew**
Equivalence testing: Bioequivalence and beyond

15:45 - 16:15 **Coffee Break**

Session: Statistics in applications

Chair: Viktor Witkovský

16:15 - 16:35 **Lynn Roy LaMotte**
ANOVA: is 100 years enough?

16:35 - 16:55 **Julianna Holmberg**
Quadratically constrained likelihood estimation for exponential regression under censoring

16:55 - 17:15 **Alicja Lerczak**
Canonical variate analysis for two-way classification applied to a fertilization experiment with winter triticale

17:15 - 17:30 **Refreshment**

Session: Memorial Session for Jerzy K. Baksalary (1944-2005)

Chair: Simo Puntanen

17:30 **Oskar Maria Baksalary**
On the Baksalary--Hauke condition aka the Rao--Mitra--Bhimasankaram relation

Jan Hauke
Remembering Jerzy K. Baksalary: My Mentor in Mathematics and Beyond

Augustyn Markiewicz
Linear admissibility and sufficiency

Thomas Mathew
Jerzy Baksalary's research: A personal note

Simo Puntanen
Photographic reminiscences of Jerzy K. Baksalary (1944-2005)

19:00 **Snack**

Scientific Programme

Wednesday, August 26

Session: Multivariate Statistics

Chair: Augustyn Markiewicz

- 09:00 - 09:20** **Dietrich von Rosen**
The Safety Belt estimation method
- 09:20 - 09:40** **Kenneth Nordström**
Convexity of the Moore–Penrose inverse
- 09:40 - 10:00** **Katarzyna Filipiak**
The power of blocks: Matrix operators for statistics

10:00 - 10:10 **Refreshment**

Session: Projection Pursuit

Chair: Jaakko Pere

- 10:10 - 10:40** **Claudio Borroni**
On the use of some unconventional projection pursuit indexes in cluster identification problems
- 10:40 - 11:10** **Manuela Cazzaro**
Competing projections techniques of multivariate quality data to monitor a production process
- 11:10 - 11:40** **Lucio De Capitani**
On copula-based systems of quantile curves with application in outliers detection

11:40 - 12:10 **Coffee Break**

Session: Copulas

Chair: Ostap Okhrin

- 12:10 - 12:40** **Konstantinos Zografos**
Statistical information theory meets copulas
- 12:40 - 13:10** **Eckhard Liebscher**
Modeling and approximation of copulas for complex data structures using Cramér-von Mises statistic
- 13:10 - 13:30** **Yarema Okhrin**
Q-Tab: Quantized tabular data generator
- 13:30 - 14:00** **Ostap Okhrin**
Dependence reduction by linear residualization

14:00 **Lunch**

Plenary Session

Chair: Jianfeng Yao

15:00 - 15:45

Elvira Di Nardo

On the combinatorics of generalized cumulants and k -statistics

15:45 - 16:15

Coffee Break

Session: Statistics in applications

Chair: Eva Fišerová

16:15 - 16:35

Peter Kovacs

Algorithmic support for judicial sentencing? Evidence from human smuggling cases

16:35 - 16:55

Patryk Kołbyko

Linear-Gaussian Laubach-Williams State-Space estimation and decomposition of the natural rate of interest – r^ : Evidence from Poland*

16:55 - 17:05

Refreshment

Session: Order Statistics

Chair: Magdalena Szymkowiak

17:05 - 17:35

Paulo Eduardo Oliveira

Stochastic dominance between linear combination

17:35 - 18:05

Agnieszka Goroncy

Discrete-time signatures of coherent systems: properties, stochastic orderings and transformations

18:05 - 18:25

Jagoda Papis

Preservation of IFR property for systems with two or three minimal paths of the same length

20:00

Conference Dinner

Scientific Programme

Thursday, August 27

Plenary Session

Chair: Syed Ejaz Ahmed

09:00 - 09:45 **Małgorzata Bogdan**
Pattern recovery by convex non-differentiable regularizers

09:45 - 10:00 **Refreshment**

Session: Projection Pursuit

Chair: Claudio Borroni

10:00 - 10:30 **Alessandro Berti**
Projection pursuit for detecting hidden structures

10:30 - 11:00 **Boaz Nadler**
A simple method for robust matrix completion with theoretical recovery guarantees

11:00 - 11:30 **Tomer Shushi**
Optimal portfolio projections: Optimizing portfolio returns in the case of elliptically and skew-elliptically distributed models

11:30 - 12:00 **Coffee Break**

Session: Statistics in Applications

Chair: Barbora Kessel

12:00 - 12:30 **Viktor Witkovský**
Computing with characteristic functions: From numerical inversion to multivariate logistic goodness-of-fit

12:30 - 13:00 **Eva Fišerová**
Beyond average speed: Functional data analysis of traffic calming effects

13:00 - 13:20 **Im Chiew Ng**
The resilience of random intercepts and slopes models to violations of the linearity assumption in the treatment group

13:20 - 13:40 **Vivien Kardos**
Examining law students' intention to use GenAI systems for professional purposes using PLS modelling

13:40 - 14:00 **Agnieszka Kwita**
Statistical comparison of wavelet and Fourier series approximation quality for audio signals

14:00 **Lunch**

15:00 **Excursion**

Scientific Programme

Friday, August 28

Session: Order Statistics

Chair: Agnieszka Goroncy

- 09:00 - 09:30** **Tomasz Rychlik**
Sharp bounds on L-moments
- 09:30 - 10:00** **Magdalena Szymkowiak**
 Φ -divergence as a measure of the predictability of reliability systems

10:00 - 10:10 **Refreshment**

Session: Projection Pursuit

Chair: Tomer Shushi

- 10:10 - 10:40** **Cinzia Franceschini**
Some remarks on kurtosis projection pursuit for clustering
- 10:40 - 11:10** **Nicola Loperfido**
A moment-based projection pursuit index

11:10 - 11:40 **Coffee Break**

Session: Inference for Non-Gaussian Distributions in Linear Models

Chair: Krzysztof Podgórski

- 11:40 - 12:10** **Anastassia Baxevani**
Moving random fields constructing and estimating motion in spatio-temporal random fields
- 12:10 - 12:30** **Stefano Bonnini**
Advances in nonparametric testing for overdispersed count data models
- 12:30 - 12:50** **Malwina Mrowińska**
Test of the quadratic subspace under elliptically contoured distribution
- 12:50 - 13:10** **Daniel Klein**
Distribution-free REMLS estimation of the AR(1) covariance structure

13:10 **Lunch**

14:00 - 14:20 Anna Szczepńska-Alvarez

Independence testing based on the covariance matrix

14:20 - 14:40 Mateusz John

Testing hypotheses on covariance matrices within linear structure spaces

14:40 - 15:00 Monika Mokrzycka

Quasi-shrinkage estimation of block covariance matrix with structured off-diagonal blocks

15:00

Closing