



8:45 - 9:00 Welcome

9:00 - 10:00 Peter Hall's Lecture: Steve Marron

Chair: Regina Liu  
Room: Akamas A

Peter Hall and High Dimension Low Sample Size Asymptotics

10:00 - 11:00 Contributed Paper Session 1

### Bayesian inference

Chair: Matteo Giordano  
Room: Akamas C

10:00 **A Bayesian Nonparametric Approach To Super-Resolution Single-Molecule Localization**

*Mariano Gabitto, Michael Jordan, Herve Marie-Nelly, Xavier Darzacq, Ari Pakman*

10:20 **Nonparametric Bayesian inference for reversible multi-dimensional diffusions**

*Matteo Giordano*

### Survival analysis I

Chair: Ali Shariati  
Room: Aphrodite A

10:00 **Quantile Regression for Interval-Censored Data using Laguerre Polynomials**

*Benjamin Deketelaere, Ingrid Van Keilegom, Anouar El Ghouch*

10:20 **Challenges with model and tuning parameter selection when using cross-validation with censored data**

*Anders Munch*

10:40 **Asymptotic Behaviour of the MRL Function Estimator with Length-biased and Right Censored Data**

*Ali Shariati, Hassan Doosti, Vahid Fakoor*

### Robust statistics I

Chair: Markus Neuhaeuser  
Room: Aphrodite B

10:00 **A Data-Driven Strategy for Specifying Cutoffs in Trimming and Winsorizing**

*Derek Young, Kedai Cheng*

10:20 **Robust estimation under a shape constraint**

*Hélène Halconruy, Yannick Baraud, Guillaume Maillard*

10:40 **Usefulness of the square-root allocation rule for many-to-one comparisons under non-normality**

*Markus Neuhaeuser*

### Clustered data

Chair: Erin Sprünken  
Room: Christian Barnard

10:00 **Leave-cluster-out technique and variance estimation when regressors are many**

*Stanislav Anatolyev*

10:20 **A generalized framework for rank-based analysis of cluster data in the several sample case**

*Erin Sprünken*



### Model selection

Chair: Ulrike Schneider

Room: Leda

10:00 **Model selection for robust learning of mutational signatures under overdispersion**  
*Marta Pelizzola, Ragnhild Laursen, Asger Hobolth*

10:20 **The Probability of Improved Prediction: a new concept in statistical inference**  
*Stijn Jaspers, Olivier Thas*

10:40 **On the geometry of uniqueness and model selection of LASSO, SLOPE and related estimators**  
*Ulrike Schneider, Patrick Tardivel*

11:00 - 11:30 Coffee Break

11:30 - 12:30 Special Invited Talk: Richard Nickl

Chair: Ricardo Cao

Room: Akamas A

Bayesian non-linear inverse problems: progress and challenges

12:30 - 13:30 Lunch Break

13:30 - 15:30 Invited Paper Session 1

### Structural inference in high dimensional models

Organiser: Eduard Belitser

Chair: Eduard Belitser

Room: Akamas A

13:30 **Dimension Estimation using Random Connection Models**  
*Paulo Serra, Michel Mandjes*

14:00 **Characterizing the Type 1-Type 2 Error Trade-off for SLOPE**  
*Cynthia Rush*

14:30 **Optimal Bayesian classification for high dimensional data**  
*Subhashis Ghoshal*

15:00 **General framework for projection structures**  
*Eduard Belitser*

### Topics in curve estimation

Organiser: Anton Schick

Chair: Uschi Müller

Room: Akamas C

13:30 **Multivariate, Heteroscedastic Empirical Bayes via Nonparametric Maximum Likelihood**  
*Bodhisattva Sen, Jake Soloff, Adityanand Guntuboyina*

14:00 **Learning high-dimensional functions by conditional least squares**  
*Stefano Vigogna*

14:30 **Nonparametric inference for general categorical time series with time-varying parameters**  
*Lionel Truquet*

15:00 **Location estimation, empirical Bayes, score matching, and their connection**  
*Min Xu*



## PROGRAMME OVERVIEW - MONDAY 20 JUNE 2022

### New directions in Bayesian nonparametric modeling

Organiser: Antonio Lijoi

Chair: Antonio Lijoi

Room: Aphrodite A

13:30 **Bayesian nonparametric methods for conditional independence testing**

*Sarah Filippi*

14:00 **Exact inference for a class of non-linear hidden Markov models on general state spaces**

*Guillaume Kon Kam King, Matteo Ruggiero, Omiros Papaspiliopoulos*

14:30 **Compound vectors of subordinators and their associated positive Lévy copulas**

*Fabrizio Leisen, Alan Riva Palacio*

15:00 **Nonparametric priors for partially exchangeable data: dependence structure and borrowing of information**

*Beatrice Franzolini, Antonio Lijoi, Igor Pruenster, Giovanni Rebaudo*

### Recent advances in functional and complex data analysis

Organiser: Paromita Dubey & Hanlin Shang

Chair: Philip Reiss

Room: Aphrodite B

13:30 **Functional depth: Recent progress and perspectives**

*Stanislav Nagy*

14:00 **Random cohort effects and age groups dependency structure for mortality modelling and forecasting: Mixed-effects time-series model approach**

*Bo Wang, Ka Kin Lam*

14:30 **Limiting laws for optimal transport plans on finite spaces**

*Yoav Zemel*

15:00 **Continuous-time multivariate analysis**

*Philip Reiss, Biplab Paul*

### Inference for Complex Problem Settings

Organiser: Regina Liu

Chair: Regina Liu

Room: Christian Barnard

13:30 **Query-augmented Active Metric Learning**

*Annie Qu*

14:00 **Additive regression with parametric help**

*Hyerim Hong, Young Kyung Lee, Byeong Uk Park*

14:30 **Repro Samples Method for Finite- and Large-Sample Inferences**

*Minge Xie*

15:00 **Sufficient Variable Selection via Expected Conditional Hilbert-Schmidt Independence Criterion**

*Chenlu (Tracy) Ke*

### Non-parametric statistical methods for extremes

Organiser: Claudia Kluppelberg

Chair: Claudia Kluppelberg

Room: Leda

13:30 **Neural Networks for Extreme Quantile Regression and Risk Assessment** Olivier Pasche, *Sebastian Engelke*

14:00 **High-dimensional extreme quantile regression using partially-interpretable neural networks** Jordan Richards, *Raphael Huser*

14:30 **Changes in the distribution of observed annual maximum temperatures in Europe**

*Ioannis Papastathopoulos, Graeme Auld, Gabriele Hegerl*

15:00 **Max-linear Bayesian networks**

*Claudia Klueppelberg*



### Recent advances in time series

Organiser: Giovanni Motta

Chair: Giovanni Motta

Room: Athena

13:30 **High-dimensional dynamic factor models: A selective survey and lines of future research.**  
*Manfred Deistler, Marco Lippi, Brian D.O. Anderson*

14:00 **Semiparametric modeling of multiple quantiles**  
*Alessandra Luati, Leopoldo Catania*

14:30 **Asymptotics for Spherical Functional Autoregressions**  
*Alessia Caponera, Domenico Marinucci*

15:00 **Sequential on-line detection and classification in 3D Computer Vision**  
*Olympia Hadjiliadis*

15:30 - 16:00 Coffee Break

16:00 - 18:00 Invited Paper Session 2

### Recent Advances in Time Series Analysis

Organiser: Jens-Peter Kreiss

Chair: Jens-Peter Kreiss

Room: Akamas A

16:00 **Testing equality of spectral density operators for functional linear processes**  
*Anne Leucht, Efstathios Paparoditis, Theofanis Sapatinas, Daniel Rademacher*

16:30 **Statistical methods for the restoration of historical music recordings**  
*Rainer Dahlhaus*

17:00 **A Bootstrap-Assisted Self-Normalization Approach to Inference in Cointegrating Regressions**  
*Carsten Jentsch, Karsten Reichold*

17:30 **Simultaneous Inference for Autocovariances based on Bootstrap Methods**  
*Alexander Braumann, Jens-Peter Kreiss, Marco Meyer*

### Nonparametrics in health related problems

Organiser: Yanyuan Ma

Chair: Yanyuan Ma

Room: Akamas C

16:00 **Multi-institutional Data for Real World Evidence**  
*Tianxi Cai*

16:30 **Marginalized frailty-based illness-death model: application to the UK-biobank survival data**  
*Malka Gorfine*

17:00 **Estimating Disease Onset from Change Points of Markers Measured with Error**  
*Tanya Garcia, Unkyung Lee, Raymond Carroll, Yuanjia Wang, Karen Marder*

17:30 **Testing for Heterogeneity in the Utility of a Surrogate Marker**  
*Layla Parast, Tianxi Cai, Lu Tian*

### New insights in bandwidth selection

Organiser: Ricardo Cao

Chair: Ricardo Cao

Room: Aphrodite A

16:00 **Bandwidth selection for modal clustering**  
*Alessandro Casa, José E. Chacón, Giovanna Menardi*



- 16:30 **Bandwidth selection for statistical matching and prediction**  
*Stefan Sperlich, Inés Barbeito, Ricardo Cao*
- 17:00 **Bootstrap bandwidth selection for nonparametric default probability estimation: application to credit risk**  
*Rebeca Pelaez, Ricardo Cao, Juan Vilar*
- 17:30 **Bagging cross-validated bandwidth selection in nonparametric regression estimation with application to Big Data**  
*Daniel Barreiro Ures, Ricardo Cao, Mario Francisco Fernández*

### Multivariate and Functional Time series

Organiser: Marco Meyer

Chair: Marco Meyer

Room: Aphrodite B

- 16:00 **Pivotal tests for relevant differences in the second order dynamics of functional time series**  
*Anne van Delft, Holger Dette*
- 16:30 **Testing Linearity for Network Autoregressive Models**  
*Mirko Armillotta, Konstantinos Fokianos*
- 17:00 **Spectral Inference for Functional Time Series in Hilbert Space**  
*Daniel Rademacher, Jens-Peter Kreiß, Efstathios Paparoditis*
- 17:30 **A frequency domain bootstrap for general multivariate stationary processes**  
*Marco Meyer, Efstathios Paparoditis*

### Recent advance in covariance estimation and functional data analysis

Organiser: Jane-Ling Wang

Chair: Derek Young

Room: Christian Barnard

- 16:00 **Functional Data Analysis of Stochastic Differential Equations**  
*Victor Panaretos, Neda Mohammadi, Leonardo Santoro*
- 16:30 **Joint non-parametric estimation of mean and auto-covariances for Gaussian processes**  
*Tatyana Krivobokova, Paulo Serra*
- 17:00 **CoPE sets and Relevant Tubes**  
*Fabian Telschow, Junting Ren, Armin Schwartzman*
- 17:30 **Interpoint-Ranking Sign Covariance for Test of Independence**  
*Kehui Chen*

### Statistical analysis of non-Euclidean and high-dimensional data

Organiser: Byeong Park

Chair: Byeong Park

Room: Leda

- 16:00 **Total Variation Regularized Frechet Regression for Metric-Space Valued Data**  
*Zhenhua Lin, Hans-Georg Mueller*
- 16:30 **Antipodal Reflection Depth (ARD) for Multivariate and Functional Data & Nonparametric Outlier Detection**  
*Regina Liu*
- 17:00 **Nonparametric regression on Lie groups with measurement errors**  
*Jeong Min Jeon, Byeong Uk Park, Ingrid Van Keilegom*
- 17:30 **Bounds for the asymptotic distribution of the likelihood ratio**  
*Andreas Anastasiou*

19:00 - 20:30 Welcome Reception



9:00 - 11:00 Invited Paper Session 3

### Semiparametric models

Organiser: Ursula Müller & Valentin Patilea

Chair: Ursula Müller

Room: Akamas A

9:00 **Compositions of discrete random structures in Bayesian nonparametrics**, Filippo Ascolani, Antonio Lijoi, Igor Pruenster, Giovanni Rebaudo

9:30 **Some recent results on semiparametric transformation models**  
Natalie Neumeier

10:00 **Wilks' Theorem for Models Defined by Conditional Moment Equations with Weakly Dependent Data**  
Valentin Patilea

10:30 **Data integration in high dimension with multiple quantiles**  
Ursula U. Müller

### New trends in high dimensional robust statistics

Organiser: Mohamed Ndaoud

Chair: Mohamed Ndaoud

Room: Akamas C

9:00 **Coding convex bodies under Gaussian noise, and the Wills functional**  
Jaouad Mourtada

9:30 **Robust leave-one-out cross-validation for high-dimensional Bayesian models**  
Giacomo Zanella

10:00 **All-In-One Robust Estimator of the Gaussian Mean**  
Arshak Minasyan

10:30 **Outlier detection in networks**  
Olga Klopp, Geneviève Robin, Solenne Gaucher

### Recent advances in change point and time series problems in high dimensions

Organiser: Hira Koul & Zhou Zhou

Chair: Liudas Giraitis

Room: Aphrodite A

9:00 **High-dimensional changepoint estimation with heterogeneous missingness**  
Tengyao Wang, Bertille Follain, Richard Samworth

9:30 **Multiple change-points detection in generalized linear models**  
Yuehua Wu

10:00 **Empirical process theory for stochastic processes using the functional dependence measure**  
Stefan Richter

10:30 **Time-Varying Instrumental Variable Estimation**  
Liudas Giraitis, George Kapetanios, Massimiliano Marcellino

### Recent contributions in statistical analysis of nonstationary processes

Organiser: Anna Dudek

Chair: Anna Dudek

Room: Aphrodite B

9:00 **Some contributions to harmonizable time series analysis**  
Jean-Marc Freyermuth

09:30 **Spectral Non-linear Granger Causality***Hernando Ombao*10:00 **Spectral density estimation for nonstationary data with nonzero mean function***Anna Dudek, Lukasz Lenart*Some recent advances in estimation and inference for complex data models

Organiser: Moulinath Banerjee

Chair: Moulinath Banerjee

Room: Christian Barnard

9:00 **Unlinked monotone regression***Charles Doss, Fadoua Balabdaoui, Cécile Durot*9:30 **A General Modeling Framework for Network Autoregressive Processes***George Michailidis*10:00 **Fast Network Community Detection with Profile-Pseudo Likelihood Methods***Ji Zhu*Computer-intensive methods and dependent data

Organiser: Dimitris Politis

Chair: Dimitris Politis

Room: Leda

9:00 **Estimation and inference via the integrated copula spectrum***Holger Dette, Stanislav Volgushev, Tobias Kley, Marc Hallin, Yuichi Goto, Ria Van Hecke*9:30 **Bootstrap for Dynamical Systems** Kasun Fernando, *Nan Zou*10:00 **High-dimensional Change-point Detection Using Generalized Homogeneity Metrics***Xianyang Zhang, Shubhadeep Chakraborty*10:30 **Rate of convergence in regenerative bootstrap***Patrice Bertail, François Portier*Recent advances in semiparametric inference

Organiser: Christophe Ley

Chair: Olivier Thas

Room: Athena

9:00 **Experiences with the super learner***Thomas Alexander Gerds*09:30 **Using Laguerre Polynomials in Semiparametric Estimation with an Application to Quantile Regression and Epidemics***Alexander Kreiss, Ingrid Van Keilegom*10:00 **Semi-parametric quantile regression***Anneleen Verhasselt, Ewnetu Worku, Irène Gijbel*10:30 **Semiparametric Methods for Covariate Adjustment for GPC Effect Sizes***Olivier Thas*

11:00 - 11:30 Coffee Break

11:30 - 12:30 Keynote Talk: Richard A. Davis

Chair: Dimitris Politis

Room: Akamas A

Statistical Learning of Multivariate Extremes



12:30 - 13:30 Lunch Break

13:30 - 15:30 Invited Paper Session 4

Recent advances in change point analysis and high-dimensional time series

Organiser: George Michailidis

Chair: George Michailidis

Room: Akamas A

13:30 **Estimation of High-Dimensional Markov-Switching VAR Models with an Approximate EM Algorithm**

*Ali Shojaie, Xiudi Li, Abolfazl Safikhani*

14:00 **Two-sample tests for relevant differences in the eigenfunctions of covariance operators**

*Alexander Aue, Holger Dette, Gregory Rice*

14:30 **Frequency-domain graphical models for multivariate time series**

*Sumanta Basu*

15:00 **Robust change point and change plane estimation in fixed and growing dimensions under heavy tailed errors**

*Moulinath Banerjee*

Recent innovations in Bayesian Nonparametrics

Organiser: Subhashis Ghoshal

Chair: Subhashis Ghoshal

Room: Akamas C

13:30 **Bayesian mode estimation and rate acceleration through a two-stage procedure**

*William Weimin Yoo*

14:00 **Characterization and Bayesian estimation of sparse regression parameters under linear inequality constraints**

*Anindya Roy*

14:30 **Bayesian sensitivity analysis for a missing outcomes model**

*Stephanie van der Pas, Bart Eggen, Aad van der Vaart*

Nonparametric approaches in Econometrics

Organiser: Enno Mammen

Chair: Enno Mammen

Room: Aphrodite A

13:30 **Flexible Covariate Adjustments in Regression Discontinuity Designs**

*Claudia Noack, Christoph Rothe, Tomasz Olma*

14:00 **Multiplicative Deconvolution In a Bivariate Stochastic Volatility Model**

*Sergio Brenner Miguel*

14:30 **Square-root-2 estimation for smooth eigenvectors of matrix-valued functions**

*Giovanni Motta, Wei Biao Wu, Mohsen Pourahmadi*

15:00 **Estimation of Group Structures in Individual Fixed Effects Models**

*Enno Mammen, Ralf Wilke, Kristina Zapp*

Resampling methods in non-standard situations

Organiser: Patrice Bertail

Chair: Patrice Bertail

Room: Aphrodite B

13:30 **Parameters on the boundary in predictive regression**

*Iliyan Georgiev, Giuseppe Cavaliere*

14:00 **General M-Estimator Processes and their m out of n Bootstrap with Functional Nuisance Parameters.**

*Anouar Abdeldjaoued Ferfache*





14:30 **Bootstrap on Null-recurrent Markov Chains**

*Carlos Fernández*

15:00 **Model-free Bootstrap and Conformal Prediction in Regression**

*Dimitris Politis, Yiren Wang*

Advances in functional data analysis

Organiser: Siegfried Hörmann

Chair: Siegfried Hörmann

Room: Christian Barnard

13:30 **Relative perturbation bounds with applications to empirical covariance operators**

*Johannes Moritz Jirak*

14:00 **Fast and Fair Simultaneous Confidence Bands for Functional Parameters**

*Dominik Liebl*

14:30 **Estimation of Functional ARMA Models**

*Thomas Kuenzer*

15:00 **On optimal prediction of missing functional data with memory**

*Germain Van Bever, Lauri Viitasaari, Pauliina Ilmonen, Tommi Sottinen, Nourhan Shafik*

New frontiers in network data analysis

Organiser: Marianna Pensky & Srijan Sengupta

Chair: Marianna Pensky

Room: Leda

13:30 **Partially-Exchangeable Multilayer Stochastic Block Models**

*Daniele Durante, Francesco Gaffi, Antonio Lijoi, Igor Prünster*

14:00 **Population-level Balance in Signed Networks**

*Ji Zhu*

14:30 **A nonparametric test of co-spectrality in networks**

*Srijan Sengupta*

15:00 **Discovering underlying dynamics in time series of networks**

*Avanti Athreya, Zachary Lubberts, Youngser Park, Carey Priebe*

Density and regression estimation under non standard conditions

Organiser: Valentin Patilea

Chair: Valentin Patilea

Room: Athena

13:30 **Empirical Risk Minimization under Random Censorship**

*Stephan Clemencon*

14:00 **Partly Linear Instrumental Variables Regression Without Smoothing on the Instruments**

*Elia Lapenta, Jean-Pierre Florens*

14:30 **Improved estimation of semiparametric cure regression models via presmoothing**

*Eni Musta, Ingrid Van Keilegom, Valentin Patilea*

15:00 **Semiparametric efficiency under identifiability constraints**

*Mélanie Zetlaoui*

15:30 - 16:00 Coffee Break



16:00 - 18:00 Invited Paper Session 5

New nonparametric and semiparametric methods on learning data with complex structures

Organiser: Wen Zhou

Chair: Chao Zheng

Room: Akamas A

16:00 **Confidence sets for Causal Discovery**

*Mladen Kolar*

16:30 **Data Integration Via Analysis of Subspaces (DIVAS)**

*Jan Hannig*

17:00 **Generalized dynamic factor models for spatio-temporal random fields on a network**

*Chao Zheng*

Expanding Statistical Frontiers with Nonparametric Methods

Organiser: Tanya Garcia

Chair: Tanya Garcia

Room: Akamas C

16:00 **Nonparametric instrumental regression with right censored duration outcomes**

*Ingrid Van Keilegom, Jad Beyhum, Jean-Pierre Florens*

16:30 **Robust and Efficient Estimation under Nonignorable Missing Response**

*Yanyuan Ma*

17:00 **Covariance and phase recovery for multivariate time series**

*Irène Gannaz, Sophie Achard*

17:30 **Bayesian variable selection based on empirical likelihood for ultra-high dimensional data**

*Xinlei Wang, Can Xu, Yichen Cheng*

New perspectives on nonparametric estimation of intensity and density functions

Organiser: Maria Dolores Martinez-Miranda

Chair: Maria Dolores Martinez-Miranda

Room: Aphrodite A

16:00 **Statistical learning for general point processes and applications to intensity and density estimation**

*Christophe A.N. Biscio, Ottmar Cronie, Mehdi Moradi*

16:30 **The modal age of Statistics**

*José E. Chacón*

17:00 **Kernel estimation methods beyond planar point processes**

*María Isabel Borrajo García*

17:30 **Superefficient estimation of future conditional hazards based on marker information**

*Alex Isakson, Jens Nielsen, Enno Mammen, Cécile Proust-Lima*

Financial Econometrics

Organiser: Genaro Sucarrat

Chair: Genaro Sucarrat

Room: Aphrodite B

16:00 **Inference on multiplicative component GARCH without any small-order moment**

*Christian Francq, Baye Matar Kandji, Jean-Michel Zakoian*

16:30 **Testing hypotheses on the innovations distribution in semi-parametric conditional volatility models**

*Jean-Michel Zakoian, Christian Francq*



- 17:00 **Subgeometrically ergodic autoregressions with autoregressive conditional heteroskedasticity**  
*Mika Meitz, Pentti Saikkonen*
- 17:30 **Robust estimation and inference for time-varying unconditional volatility** Rickard Sandberg, Genaro Sucarrat

### Nonparametric estimation

Organiser: Alexander Goldenshluger  
Chair: Alexander Goldenshluger  
Room: Christian Barnard

- 16:00 **Semi-parametric Bernstein-von Mises theorem for densities with jump under a mixture prior**  
*Natalia Bochkina, Judith Rousseau, J.-B. Salomond, Johan van der Molen Moris*

- 16:30 **Statistical guarantees for high dimensional generative models**  
*Amak Dalalyan, Victor-Emmanuel Brunel, Nicolas Schreuder*

- 17:00 **Semiparametric estimation of McKean-Vlasov SDEs**  
*Denis Belomestny, Vytaute Pilipauskaite, Mark Podolskij*

- 17:30 **Semiparametric ordered inference for conditional distributions**  
*Ori Davidov*

### Statistical methodology for complex and heterogeneous data

Organiser: Alexander Aue  
Chair: Alexander Aue  
Room: Leda

- 16:00 **Graphical models for nonstationary time series**  
*Suhasini Subbarao, Sumanta Basu*

- 16:30 **Preprocessing functional data by a factor model approach**  
*Siegfried Hörmann, Fatima Jammoul*

- 17:00 **Bootstrapping Spectral Statistics in High Dimensions**  
*Miles Lopes, Andrew Blandino, Alexander Aue*

- 17:30 **Functional Sequential Treatment Allocation**  
*David Preinerstorfer, Anders Bredahl Kock, Bezirgen Veliyev*

### Exotic Testing and Inverse Problems

Organiser: Robert Mnatsakanov  
Chair: Robert Mnatsakanov  
Room: Athena

- 16:00 **What is the resolution of a microscope?**  
*Frank Werner*

- 16:30 **Goodness of Fit Testing for Point Processes in Survival Analysis**  
*Umut Can, Roger Laeven, Estate Khmaladze*

- 17:00 **Identification of convex polygons and non-negative probability measures on convex polygons from moment data**  
*Farhad Jafari, Robert Mnatsakanov, Satwik Pani*

- 17:30 **A unified method of estimation in some statistical inverse problems**  
*Robert Mnatsakanov*

18:15 - 19:15 General Meeting

Room: Akamas A

9:00 - 10:00 Keynote Talk: Aurore Delaigle

Chair: Marianna Pensky

Room: Akamas A

Estimation of the Distribution of Episodically Consumed Foods Measured with Error

10:00 - 11:00 Contributed Paper Session 2

Censored and missing data

Chair: Amichai Painsky

Room: Akamas A

10:00 **Nonparametric survival estimation with missing not at random censoring indicators**

*Mikael Escobar-Bach, Olivier Goudet*

10:20 **The mean, variance and correlation for bivariate recurrent event data with a terminal event**

*Frank Eriksson*

10:40 **Seeing the Unseen - a New Scheme for Missing Mass Estimation**

*Amichai Painsky*

High-dimensional data Chair: Nicolas Tavernier

Room: Akamas C

10:00 **Exponential bounds for regularized Hotelling statistics in high dimension**

*El Mehdi Issouani, Patrice Bertail, Emmanuelle Gautherat*

10:20 **Quantile LASSO with changepoints in panel data models**

*Matus Maciak*

10:40 **Nonlinear shrinkage estimation of large-dimensional covariance matrices using splines**

*Nicolas Tavernier, Geert Dhaene*

Copulas

Chair: Amitava Mukherjee

Room: Aphrodite A

10:00 **Tests of constant conditional dependence structures over partition sets**

*Jean-David Fermanian, Alexis Derumigny, Aleksey Min*

10:20 **Variable clustering using divergence type of dependence measures between random vectors**

*Steven De Keyser, Irène Gijbels*

10:40 **Nonparametric Surveillance of Unknown Structural Dependence in High-Dimensional Processes using Pseudo Copula and Eigenvectors – A Computational Approach**

*Amitava Mukherjee*

Screening and classification

Chair: Dragan Radulovic

Room: Aphrodite B

10:00 **Novel nonparametric specification tests for additive concurrent model formulation**

*Laura Freijeiro-González, Manuel Febrero-Bande, Wenceslao González-Manteiga*

10:20 **Nonparametric Screening and Selection in presence of dependence among predictors with applications to environmental pollutants**

*Sanjib Basu*

10:40 **Accelerated Random Search for Weighted Nearest Neighbors**

*Dragan Radulovic*



### Ranks and permutations Chair: Niels Olsen

Room: Leda

10:00 **A comparison of statistical methods for analyzing longitudinally measured ordinal outcomes in rare diseases**  
*Martin Geroldinger, Johan Verbeek, Konstantin Emil Thiel, Geert Molenberghs, Arne Bathke, Georg Zimmermann*

10:20 **Anomaly Detection for a Large Number of Streams: A Permutation/Rank-Based Higher Criticism Approach**  
*Ivo V. Stoepker, Rui M. Castro, Ery Arias-Castro, Edwin R. van den Heuvel*

10:40 **Confidence regions for univariate and multivariate data using permutation tests**  
*Niels Olsen*

### Functional & Clustered Data

Chair: Tomas Masak

Room: Athena

10:00 **Convolutional Networks and Tensor Product ANOVA Smoothing Splines**  
*Zaid Harchaoui, Meyer Scetbon*

10:20 **Nonparametric regression with clustered observations**  
*Stanislav Anatolyev*

10:40 **Inference and Computation for Sparsely Sampled Random Surfaces**  
*Tomas Masak*

### Time series

Chair: Carina Beering

Room: Zeus

10:00 **Fully data-driven non-parametric estimation of Toeplitz covariance matrices**  
*Karolina Klockmann*

10:20 **A Test of Independence for Locally Stationary Processes Using a Weighted Characteristic Function- based Distance**  
*Carina Beering*

11:00 - 11:30 Coffee Break

11:30 - 12:30 Special Invited Talk: Victor Chernozhukov

Chair: Ingrid Van Keilegom

Room: Akamas A

Long Story Short: Omitted Variable Bias in Causal Machine Learning

12:30 - 13:30 Lunch Break

16:00 - 22:00 Excursion & Conference Dinner



9:00 - 11:00 Invited Paper Session 6

New issues in deconvolution problems

Organiser: Clément Marteau

Chair: Clément Marteau

Room: Akamas A

9:00 **Adaptive minimax testing for circular convolution**

*Sandra Schluttenhofer, Jan Johannes*

9:30 **Deconvolution for some singular density errors with respect to the L1 loss**

*Mathieu Sart*

10:00 **Rate optimal estimation of quadratic functionals in inverse problems with partially known operator**

*Martin Kroll*

Statistics under nonstationarity

Organiser: Anne Leucht

Chair: Anne Leucht

Room: Akamas C

9:00 **Poisson Network Autoregression**

*Konstantinos Fokianos, Mirko Armillotta*

9:30 **Bootstrap for integer-valued GARCH(p,q) processes**

*Michael Neumann*

10:00 **Bootstrap confidence bands for the mean and covariance kernel of Banach space valued functional data**

*Melanie Birke, Christoph Reihl*

10:30 **Learning to reflect**

*Lukas Trottnner*

Topics in Econometrics: partial identification, boundary-adaptive kernel density estimation, and more TBA

Organiser: Jeff Racine

Chair: Jeff Racine

Room: Aphrodite A

09:00 **Estimating High Dimensional Monotone Index Models by Iterative Convex Optimization 1**

*Shakeeb Khan, Xiaoying Lan, Elie Tamer*

**On Optimal Set Estimation for Partially Identified Binary Choice Models**

*Shakeeb Khan, Tatiana Komorova, Denis Nekipelou*

09:30 **Dynamic Ordered Panel Logit Models**

*Chris Muris, Bo Honoré, Martin Weidner*

10:00 **Time-Varying Linear Transformation Models with Fixed Effects and Endogeneity for Short Panels**

*Irene Botosaru, Chris Muris, Senay Sokullu*

10:30 **Boundary-Adaptive Kernel Density Estimation - Empirical Support Kernels and Cross-Validation: The Curious Case of the Uniform Density**

*Jeffrey Racine, Qi Li*



### New developments in rank-based methods

Organiser: Michele La Rocca

Chair: Valeria Vitelli

Room: Aphrodite B

09:00 **Avoiding Degeneracies in Ordinal Unfolding Using Kemeny-Equivalent Dissimilarities for Two-Way Two-Mode Preference Rank Data**

*Antonio D'Ambrosio*

09:30 **Permutation testing for thick data when the number of variables is much greater than the sample size**

Patrick Langthaler, Riccardo Ceccato, Arne Bathke, Rosa Arboretti, *Luigi Salmaso*

10:00 **Ranks or Pseudo-Ranks? Some practical considerations**

*Georg Zimmermann, Arne C. Bathke*

10:30 **Pseudo-Mallows for Efficient Probabilistic Preference Learning**

*Valeria Vitelli*

### New frontiers in network data analysis

Organiser: Marianna Pensky & Srijan Sengupta

Chair: Srijan Sengupta

Room: Christian Barnard

09:00 **Clustering of Diverse Multiplex Networks**

*Marianna Pensky*

9:30 **Avoiding a popularity contest: network clustering with the random walk Laplacian**

*Alexander Modell*

10:00 **Pseudo-likelihood-based M-estimation of networks with dependent connections and parameter vectors of increasing dimension**

*Michael Schweinberger, Jonathan R. Stewart*

### Advances in semiparametric and nonparametric copula-based inference

Organiser: Irène Gijbels

Chair: Irène Gijbels

Room: Leda

9:00 **Bernstein estimators for conditional copulas and their derivatives**

*Noel Veraverbeke*

9:30 **A universal representation of statistical dependence**

*Gery Geenens*

10:00 **Kernel estimation of copulas for circular distributions**

*Jose Ameijeiras-Alonso, Irène Gijbels*

10:30 **Flexible multivariate distributions with central symmetry**

*Jonas Baillien, Irène Gijbels, Anneleen Verhasselt*

### Nonparametric statistics and geometry

Organiser: Athanasios Georgiadis

Chair: Athanasios Georgiadis

Room: Athena

9:00 **Nonparametric estimation of covariance and autocovariance operators on the sphere**

*Alessia Caponera, Julien Fageot, Matthieu Simeoni, Victor M. Panaretos*

9:30 **Density estimation on manifolds or more general metric spaces**

*Galatia Cleanthous, A..G. Georgiadis, G. Kerkyacharian, P. Petrushev, D. Picard*

10:00 **On high-frequency limits of U-statistics in Besov spaces over compact manifolds**

*Claudio Durastanti, Domenico Marinucci, Xiaohong Lan*

10:30 **On the rate of estimation for the invariant density of stochastic differential equations.**

*Chiara Amorino, Arnaud Gloter*

11:00 - 11:30 Coffee Break

11:30 - 12:30 Keynote Talk: Martin Wainwright

Chair: Alexander Goldenshluger

Room: Akamas A

**Non-parametric estimation for reinforcement learning**

12:30 - 13:30 Lunch Break

13:30 - 15:30 Invited Paper Session 7

### Nonparametric Testing

Organiser: Miguel Delgado

Chair: Miguel Delgado

Room: Akamas A

13:30 **On the T-test**  
*Sergei. Novak*

14:00 **Robust Inference On Infinite And Growing Dimensional Time Series Regression**  
*Abhimanyu Gupta, Myung Hwan Seo*

14:30 **Debiased Semiparametric U-Statistics With an Application to Inequality of Opportunity**  
*Juan Carlos Escanciano*

15:00 **Pearson Tests for Conditional Distributions.**  
*Miguel A Delgado, Julius Vainora*

### Modern challenges in structured time series data

Organiser: Yi Yu

Chair: Yi Yu

Room: Akamas C

13:30 **Adversarially robust change point detection**  
*Mengchu Li, Yi Yu*

14:00 **Network Estimation by Mixing: Adaptivity and More**  
*Can Le, Tianxi Li*

14:30 **Random Subspace Ensemble**  
*Yang Feng*

15:00 **Optimal partition recovery: from chain graphs to lattices then general graphs.**  
*Yi Yu*

### Nonparametric random coefficient regression Organiser: Hajo Holzmann

Chair: Hajo Holzmann

Room: Aphrodite A

13:30 **Rate-optimal nonparametric estimation for random coefficient regression models**  
Hajo Holzmann, *Alexander Meister*

14:00 **Random coefficients when regressors have limited variation** Christophe Gaillac, *Eric Gautier*

14:30 **Tests for Qualitative Features in the Random Coefficients Model**  
*Katharina Proksch, Fabian Dunker, Konstantin Eckle, Johannes Schmidt-Hieber*

15:00 **Varying Random Coefficient Models**  
*Christoph Breunig*





### New developments of semi- and nonparametric methods in biostatistics

Organiser: Ronghui Xu

Chair: Ronghui Xu

Room: Aphrodite B

13:30 **Statistical modelling of COVID-19 data: Putting generalised additive models to work**  
*Ursula Berger*

14:00 **Doubly Robust Estimation under the Marginal Structural Cox Model for a Binary Treatment**  
*Denise Rava, Ronghui Xu, Jelena Bradic*

14:30 **Semiparametric Estimation for Non-randomly Truncated Data**  
*Ronghui Xu, Yuyao Wang, Andrew Ying*

### OODA: Trees and Graph Structured Objects

Organiser: Steve Marron

Chair: Steve Marron

Room: Christian Barnatd

13:30 **Regression Model with Unlabelled Network Response on Graph Space.**  
*Anna Calissano, Aasa Feragen, Simone Vantini*

14:00 **Manifold valued data analysis of samples of Networks**  
*Katie Severn, Ian Dryden, Simon Preston*

14:30 **Null hypothesis testing for network-valued data with a multiscale approach: analysis of brain networks of patients with autism.**  
*Alessia Pini, Ilenia Lovato, Stamm Aymeric, Maxime Taquet, Simone Vantini*

15:00 **Finite sample smeariness of Fréchet means on manifolds**  
*Stephan Huckemann, Benjamin Eltzner, Shayan Hundrieser*

### Data Analysis on Stratified Spaces with applications to SARSCov2 RNA analysis

Organiser: Vic Patrangenaru

Chair: Vic Patrangenaru

Room: Leda

13:30 **Wald Space for Statistics of Phylogenetic Trees**  
*Jonas Lueg, Stephan F. Huckemann, Tom M. W. Nye, Maryam K. Garba*

14:00 **Investigating Two Possible Origins of SARS-CoV-2: an RNA Analysis on Tree Spaces**  
*Roland Moore, Victor Patrangenaru, Adam Dixon*

14:30 **CLT on Stratified Spaces with an example of phylogenies of SARS-CoV-2 data**  
*Vic Patrangenaru, Chen Shen*

### Statistical Inference in Models with Functional Data

Organiser: Wenceslao Gonzalez Manteiga

Chair: Pedro Galeano

Room: Athena

13:30 **Bootstrap test for the equality of distributions in separable Hilbert spaces**  
*Ana Colubi, Gil Gonzalez-Rodriguez, Wenceslao Gonzalez-Manteiga, Manuel Febrero-Bande*

14:00 **On the complexity index of a functional time series**  
*Kwo Lik (Lax) Chan, Aldo Goia, Enea Bongiorno*

14:30 **A goodness-of-fit test for functional time series with applications to diffusion processes**  
*Javier Alvarez-Liéban, Wenceslao González-Manteiga, Alejandra López-Pérez, Manolo Febrero-Bande*

15:00 **Goodness-of-fit tests for the functional linear model with scalar response with responses missing at random**  
*Manuel Febrero-Bande, Pedro Galeano, Eduardo García-Portugués, Wenceslao González-Manteiga*

15:30 - 16:00 Coffee Break

16:00 - 18:00 Invited Paper Session 8

Nonparametric approaches in survival analysis

Organiser: Ingrid Van Keilegom

Chair: Ingrid Van Keilegom

Room: Akamas A

16:00 **Instrumental variable estimation of dynamic treatment effects on a survival outcome**

*Jad Beyhum, Samuele Centorrino, Jean-Pierre Florens, Ingrid Van Keilegom*

16:30 **A new lack-of-fit test for censored quantile regression models when the covariate is high-dimensional**

*Mercedes Conde-Amboage, Ingrid Van Keilegom, Wenceslao González-Manteiga*

17:00 **Causal inference for semi-competing risks data**

*Daniel Nevo, Malka Gorfine*

Bayesian Nonparametrics: theory and computation

Organiser: Sergios Agapiou

Chair: Sergios Agapiou

Room: Akamas C

16:00 **Complexity of coordinate-wise inference algorithms for crossed random effects**

*Omiros Papaspiliopoulos, Giacomo Zanella, Swarnadip Ghosh*

16:30 **A Bayesian Nonparametrics Analysis of Finite Element and Graphical Representations of Gaussian Processes**

*Daniel Sanz-Alonso, Ruiyi Yang*

17:00 **A unified construction for series representations and finite approximations of completely random measures.**

*Xenia Miscouridou*

17:30 **Linear methods for non-linear inverse problems**

*Botond Szabo, Aad van der Vaart, Geerten Koers*

Recent advances in nonparametric and semiparametric statistics

Organiser: Lan Wang

Chair: Irène Gijbels

Room: Aphrodite A

16:00 **Clustering on the Sphere: State-of-the-art and a Poisson kernel-based method**

*Marianthi Markatou*

16:30 **"Flexible Semi-Parametric Gaussian Process Classification".**

*Dipak Dey, Zhiyong Hu*

17:00 **Gaussian copulas adjusted for non- and semi-parametric regression**

*Irène Gijbels, Yue Zhao, Ingrid Van Keilegom*

Statistical Topological Data Analysis and Geometric Inference

Organiser: Johannes Krebs

Chair: Daniel Rademacher

Room: Aphrodite B

16:00 **Goodness-of-fit tests for spatial tessellations based on the persistence diagram**

*Christian Hirsch, Johannes Krebs, Claudia Redenbach*

16:30 **Large deviation principle for geometric and topological functionals and associated point processes**

*Takashi Owada, Christian Hirsch*

17:00 **Statistical Query Complexity of Manifold Estimation**

*Eddie Aamari*

17:30 **Topological Inference via Bootstrap Resampling**

*Benjamin Roycraft*

**PROGRAMME OVERVIEW - THURSDAY 23 JUNE 2022**Extremes and Machine Learning

Organiser: Anna Kiriliouk  
 Chair: Ioannis Papastathopoulos  
 Room: Christian Barnard

- 16:00 **Extreme value statistics in semi-supervised models**  
*John Einmahl*
- 16:30 **Bayesian semi-parametric modeling of jointly heteroscedastic extremes**  
*Karla Vianey Palacios Ramirez*
- 17:00 **Extreme conditional expectile estimation in heavy-tailed heteroscedastic regression models**  
*Gilles Stupfler, Stéphane Girard, Antoine Usseglio-Carleve*
- 17:30 **Cross validation for rare events.**  
*Anass Aghbalou*

Analysis of high-dimensional complex data

Organiser: Eugen Pircalabelu  
 Chair: Eugen Pircalabelu  
 Room: Leda

- 16:00 **Sufficient Dimension Reduction for high-dimensional settings**  
*Andreas Artemiou, Eugen Pircalabelu*
- 16:30 **Stationary Subspace Analysis - A Statistical Perspective**  
*Klaus Nordhausen, Lea Flumian, Markus Martilainen*
- 17:00 **Inference for the explained Gini coefficient: a penalized bootstrap procedure**  
*Alexandre Jacquemain, Cédric Heuchenne, Eugen Pircalabelu*
- 17:30 **The Completion Of Covariance Kernels**  
*Kartik Waghmare*

Topics in nonparametric inference and estimation

Organiser: Hira L. Koul & Indeewara Perera  
 Chair: Indeewara Perera  
 Room: Athena

- 16:00 **Testing for Restricted Stochastic Dominance under Survey Nonresponse with Panel Data**  
*Rami Tabri, Matthew Elias*
- 16:30 **Seasonal Cyclical Models**  
*Natalia Bailey, Karim Abadir, Walter Distaso, Liudas Giraitis*
- 17:00 **Optimal bias correction of the log-periodogram estimator of the fractional parameter: A jackknife approach**  
*Kanchana Nadarajah, Gael M Martin, Donald S Poskitt*
- 17:30 **Specification tests for GARCH processes with nuisance parameters on the boundary**  
*Indeewara Perera*
- 18:15 - 19:15 Poster Session – Room: Foyer
- Bounding the error of discretized Langevin algorithms for non-strongly log-concave targets,  
*Arnak Dalalyan, Lionel Riou-Durand, Avetik Karagulyan*
  - Bayesian Nonparametric Methods for Comparative Judgement Models and Vulnerability Estimation in Developing Countries  
*Rowland Seymour, David Sirl, Simon Preston, James Goulding, Madeleine Ellis*
  - Mean Shrinkage Estimation for Diagonal Multivariate Natural Exponential Families  
*Nikolas Siapoutis, Bharath Sriperumbudur, Donald Richards*
  - A Gaussian model for survival data subject to dependent censoring and confounding  
*Gilles Crommen, Jad Beyhum, Ingrid Van Keilegom*
  - Advances in Multi-Output Quantile Regression  
*Miroslav Siman*
  - Partially linear additive models on symmetric positive-definite matrices and Lie groups  
*Changwon Choi, Byeong Uk Park, Zhenhua Lin*
  - Reconstruction of discretely sampled functional data with missing values  
*Siegfried Hörmann, Maximilian Ofner*
  - A model-based approach to density estimation in sup-norm  
*Guillaume Maillard*

9:00 - 10:00 Special Invited Talk: Gabor Lugosi

Chair: Omiros Papaspiliopoulos

Room: Akamas A

Problems in network archaeology: root finding and broadcasting

10:00 - 11:00 Contributed Paper Session 3

### Nonparametric regression

Chair: Leonie Selk

Room: Akamas C

10:00 **Nonparametric tests to detect trends based on theory of records. An application to the analysis of climate change**

*Ana C Cebrian, Jorge Castillo, Jesús Asín*

10:20 **Panel nonparametric regression with tensorial long short-term memory recurrent neural networks**

*Andrej Srakar*

10:40 **Nonparametric Regression and Classification with Functional, Categorical, and Mixed Covariates**

*Leonie Selk, Jan Gertheiss*

### Survival analysis II

Chair: Ali Shariati

Room: Aphrodite A

10:00 **Instrumental variable quantile regression under random right censoring**

*Lorenzo Tedesco, Jad Beyhum, Ingrid Van Keilegom*

10:20 **Single-index mixture cure models. An application to a study of cardiotoxicity in breast cancer patients.**

*Beatriz Piñeiro Lamas, Ricardo Cao, Ana López Cheda*

10:40 **A Goodness-of-fit Test with Length-biased Data**

*Ali Shariati, Vahid Fakoor, Mahboobeh Akbari*

### Statistical inference in complex models

Chair: Yann Issartel

Room: Aphrodite B

10:00 **Geometric-Median-of-Means in Non-Positive Curvature Spaces**

*Ho Yun, Byeong Uk Park*

10:20 **Bootstrap inference in functional linear regression models with scalar response**

*Hyemin Yeon, Danieal Nordman, Xiongtao Dai*

10:40 **The Seriation and 1D-localization problems in latent space models.**

*Yann Issartel*

### Directional data Chair: Diego Bolon

Room: Christian Barnard

10:00 **Nonparametric regression estimation for a functional-circular model**

*Andrea Meilan-Vila, Rosa M. Crujeiras, Mario Francisco-Fernández*

10:20 **Nonparametric multimodal regression for a circular response**

*Maria Alonso-Pena, Rosa M. Crujeiras*

10:40 **A hybrid method for estimating highest density regions of directional data**

*Diego Bolón, Rosa M. Crujeiras, Alberto Rodríguez-Casal*

Robust Statistics II

Chair: Alexandre Lecestre

Room: Leda

10:00 **Computation of the halfspace depth regions – exact algorithm***Petra Laketa, Stanislav Nagy, Vit Fojtik, Pavlo Mozharovskyi*10:20 **Robust estimation in finite state space hidden Markov models***Alexandre Lecestre*

11:00 - 11:30 Coffee Break

11:30 - 12:30 Contributed Paper Session 4

Permutation tests

Chair: Nick Koning

Room: Akamas C

11:30 **Time series comparisons: a permutation approach***Stefano Bonnini, Michela Borghesi*11:50 **More Efficient Exact Permutation Tests***Nick Koning, Jesse Hemerik*Change point analysis

Chair: Florian Pein

Room: Aphrodite A

11:30 **Semiparametric Detection of Changepoints in Location, Scale and Copula***Gaurav Agarwal, Idris Eckley, Paul Fearnhead*11:50 **NP-FOCuS: a Nonparametric Approach for Online Changepoint Detection***Gaetano Romano, Idris Eckley, Paul Fearnhead*12:10 **Cross-validation for change-point regression: pitfalls and solutions***Florian Pein*Robust statistics III

Chair: Ragnhild Laursen

Room: Aphrodite B

11:30 **Robust estimation of a regression function in exponential families***Juntong Chen*11:50 **Robust estimation of non-negative matrix factorization for mutational signatures using a flexible parametrization***Ragnhild Laursen, Asger Hobolth, Lasse Maretty Sørensen*Applications of nonparametric inference

Chair: Prajamitra Bhuyan

Room: Christian Barnard

11:30 **Adaptive wavelet estimation of a latent variable model***Andrej Srakar, Marilena Vecco*11:50 **Sales Forecasting with Weather Data using Fuzzy Natural Logic***Tomas Tichy*12:10 **Analysing the causal effect of London cycle superhighways on traffic congestion***Prajamitra Bhuyan, Emma McCoy, Haojie Li, Daniel Graham*

**PROGRAMME OVERVIEW - FRIDAY 24 JUNE 2022**Extreme values

Chair: Dora Prata Gomes  
Room: Leda

- 11:30 **Semi-parametric weighted Hill estimators**  
*Frederico Caeiro, Ayana Mateus*
- 11:50 **Nonparametric Asymptotic Confidence Intervals for Extreme Quantiles**  
*Samuel Maistre, Laurent Gardes*
- 12:10 **Nonparametric resampling methods in the estimation of parameters of rare events**  
*Dora Prata Gomes, Helena Penalva, Sandra Nunes, Manuela Neves*

12:30 - 13:30 Lunch Break

13:30 - 15:30 Invited Paper Session 9

Inference for Dependent Data

Organiser: Kostas Fokianos  
Chair: Kostas Fokianos  
Room: Akamas A

- 13:30 **High-Dimensional Mixed Models with Varying Coefficients and Functional Random Effects** Michael Law,  
*Ya'acov Ritov*
- 14:00 **Monotonic Alpha-divergence Minimisation for Variational Inference**  
*Kamelia Daudel, Randal Douc, Francois Roueff*
- 14:30 **Hold-out estimates of prediction models for Markov processes**  
*Joseph Rynkiewicz*
- 15:00 **Testing for changes in the tail-index of Long Memory Stochastic Volatility time series**  
*Davide Giraud, Annika Betken, Rafal Kulik*

Nonparametric Approaches to Complex Data Problems

Organiser: Somnath Datta  
Chair: Somnath Datta  
Room: Akamas C

- 13:30 **A Bayesian nonparametric approach to causal mediation with multiple mediators**  
*Michael Daniels*
- 14:00 **Structurally Sparse Bayesian Neural Networks**  
*Taps Maiti, Sanket Jantree, Shrijita Bhattacharya*
- 14:30 **Semiparametric Analysis of Clustered Interval-Censored Survival Data using Soft Bayesian Additive Regression Trees**  
*Debajyoti Sinha, Piyali Basak, Antonio Linero*
- 15:00 **Regression Analysis of a Future State Entry Time Distribution Conditional on a Past State Occupation in a Progressive Multistate Model**  
*Somnath Datta*

Computational Statistics

Organiser: Stefan Sperlich  
Chair: Stefan Sperlich  
Room: Aphrodite A

- 13:30 **Nonparametric inference for big-but-biased data**  
*Ricardo Cao, Laura Borrajo*
- 14:00 **Local inference for data giants**  
*Gilles Cattani, Michael Scholz, Stefan Sperlich*
- 14:30 **Multivariate nonparametric change point detection with Random Forests and other classifiers**  
*Solt Kovács, Malte Lonschien, Peter Bühlmann*
- 15:00 **Sparse Deep Learning**  
*Johannes Lederer*



### Multivariate Non-Parametric Tests

Organiser: Simos Meintanis

Chair: Charl Pretorius

Room: Aphrodite B

13:30 **On the IPCW approach for testing independence**

Marija Cuparić, *Bojana Milošević*

14:00 **Optimal nonparametric testing of Missing Completely At Random, and its connections to compatibility**

*Tom Berrett*

14:30 **Inference procedures for models with multivariate elliptically symmetric stable Paretian laws**

*Charl Pretorius, Simos Meintanis, John Nolan, Zhou Zhou*

### Functional estimation in Monte Carlo methods

Organiser: Sylvain Le Corff

Chair: Luc Lehericy

Room: Christian Barnard

13:30 **Diffusion Schrodinger Bridge and Score-Based Generative Modeling**

*Valentin De Bortoli, James Thornton, Arnaud Doucet, Jeremy Heng*

14:00 **Fundamental limits for learning hidden Markov model parameters**

*Kweku Abraham, Elisabeth Gassiat, Zacharie Naulet*

14:30 **Deconvolution with general and unknown noise distribution**

*Luc Lehericy, Sylvain Le Corff, Elisabeth Gassiat*

### Stochastic networks, graphs, and random matrices

Organiser: Anirban Dasgupta

Chair: Eugen Pircalabelu

Room: Leda

13:30 **Efficiency Lower Bounds for Distribution-Free Nonparametric Tests Based on Optimal Transport**

*Nabarun Deb, Bhaswar Bhattacharya, Bodhisattva Sen*

14:00 **Network Regression and Supervised Centrality Estimation**

*Junhui Cai, Dan Yang, Wu Zhu, Haipeng Shen, Linda Zhao*

14:30 **Community detection on probabilistic graphical models with group-based penalties**

*Gerda Claeskens, Eugen Pircalabelu*

### Recent advances in dimension reduction and functional data analysis

Organiser: Bing Li

Chair: Efstathia Bura

Room: Athena

13:30 **Statistical Inference For Functional Linear Quantile Regression**

*Peijun Sang*

14:00 **Nonparametric graphical models for high-dimensional functional data**

*Efthychia Solea, Holger Dette*

14:30 **Functional Single-Index Models and Gaussian Stein's Identity**

*Bharath Sriperumbudur, Krishna Balasubramanian, Hans-Georg Mueller*

15:00 **Sufficient dimension reductions for mixed predictors**

*Efstathia Bura, Liliana Forzani, Pamela Llop, Rodrigo Garcia Arancibia, Diego Tomass*