

12:00–13:30 Registration

13:30–14:15 Opening Ceremony

[Room 0.03]

14:15–15:15 Opening Lecture

[Room 0.03]

Session chair: Xuming He

Angelika Rohde

Bootstrap of high-dimensional sample covariance matrices

15:15–15:45 Coffee break

15:45–17:30 Invited and Contributed Sessions

IS01. Recent advances in change-point analysis

[Room 0.03]

Session organizer: Haeran Cho

Session chair: Andreas Anastasiou

15:45–16:15 Andreas Anastasiou *Generalized multiple change-point detection in the structure of multivariate, possibly high-dimensional, data sequences*

16:15–16:45 Florian Pein *High-dimensional change-point regression with structured information*

Lorenzo Trapani *(cancelled) Change-point detection in large factor models*

IS04. Spatial statistics: testing issues

[Room 0.06]

Session organizer: Aila Särkkä

Session chair: Jonas Wallin

15:45–16:15 Chiara Fend *Goodness-of-Fit Tests for Spatial Point Processes*

16:15–16:45 Tomáš Mrkvička *Advantages of nonparametric testing in spatial statistics*

16:45–17:15 Jonas Wallin *Inference for multivariate random fields*

CS01. Bayesian methods 1

[Room 1.01]

15:45–16:05 Georgios Aivaliotis *Automatic model training under restrictive time constraints*

16:05–16:25 Agata Boratyńska *Robust Bayesian estimation and prediction in gamma-gamma model of claim reserves*

16:25–16:45 Dani Gamerman *Exact non-parametric inference for spatial point processes; with applications from Epidemiology to Ecology*

16:45–17:05 Dennis Christensen *A symmetry-based simulation method for Bayesian nonparametric models with binary response data*

CS02. High-dimensional 1

[Room 1.40]

15:45–16:05 Antoine Caillebotte *Variables selection in high dimension in a joint model of survival times and longitudinal outcomes with random effects*

16:05–16:25 Wojciech Rejchel *Improving Group Lasso for high-dimensional categorical data*

16:25–16:45 Marion Naveau *High-dimensional variable selection in nonlinear mixed effects models using a stochastic EM spike-and-slab*

16:45–17:05 Nayel Bettache *Two-Sided Matrix Regression*

CS03. Statistics for stochastic processes

[Room 2180]

15:45–16:05	Niklas Dexheimer	<i>On Lasso and Slope drift estimators for Lévy-driven Ornstein–Uhlenbeck processes</i>
16:05–16:25	Lukas Trottnner	<i>Concentration analysis of multivariate elliptic diffusions</i>
16:25–16:45	Oleksii Kulyk	<i>Regularity of laws and statistical inference for Markov processes: from LAN property to LAD estimators</i>
16:45–17:05	Andreas Futschik	<i>Phase Type Distributions in Population Genetics</i>
17:05–17:25	Yuliya Mishura	<i>Parameter estimation in diffusion and fractional diffusion models</i>

CS04. Stochastic processes

[Room 5440]

15:45–16:05	Atsushi Takeuchi	<i>Integration by parts formulas for marked Hawkes processes</i>
16:05–16:25	Jacek Miękisz	<i>Random walks with asymmetric time delays</i>
16:25–16:45	Yedidya Rabinovitz	<i>A Novel Way for Inflation Forecasting? The Case for the Close End Formulas</i>
16:45–17:05	Myrto Limnios	<i>Nonparametric Modelling of Event Processes with Applications to Conditional Local Independence Testing</i>
17:05–17:25	Irada Dzhalladova	<i>Moment equations for homographic difference equations with random structure</i>

17:30–19:30 Welcome reception

09:30–10:30 Special Invited Lecture

[Room 0.03]

Session chair: Thomas Mikosch

Po-Ling Loh

*Robust regression revisited***10:30–11:00 Coffee break****11:00–12:40 Invited and Contributed Sessions****IS06. Adversarial estimation and robustness in causal inference**

[Room 0.03]

Session organizer and chair: Alex Luedtke

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|-------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------|
| 11:00–11:30 | Antoine Chambaz | <i>Learning, evaluating and analysing a recommendation rule for early blood transfer in the ICU</i> |
| 11:30–12:00 | Nathan Kallus | [virtual] <i>Near-Optimal Non-Parametric Sequential Tests and Confidence Sequences with Possibly Dependent Observations</i> |
| 12:00–12:30 | Alex Luedtke | <i>Debiased Estimation of Differentiable Hilbert-Valued Parameters</i> |

IS07. Nonparametric statistics for stochastic processes

[Room 0.06]

Session organizer and chair: Mathias Trabs

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|-------------|------------------|---------------------------------------------------------------------------------------------------------------------|
| 11:00–11:30 | Randolf Altmeyer | <i>Optimal parameter estimation for linear SPDEs</i> |
| 11:30–12:00 | Markus Bibinger | <i>Testing for jumps in processes with integral fractional part and jump-robust inference on the Hurst exponent</i> |
| 12:00–12:30 | Ester Mariucci | <i>Nonparametric density estimation of small jumps of Lévy processes</i> |

CS05. Classification

[Room 1.01]

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|-------------|-------------------------|------------------------------------------------------------------------------------------------------------------|
| 11:00–11:20 | Jang Schiltz | <i>Finite Mixture Models for an underlying Beta distribution with an application to COVID-19 data</i> |
| 11:20–11:40 | Felix Kuchelmeister | <i>Finite sample rates for logistic regression with small noise or few samples</i> |
| 11:40–12:00 | Jan Mielniczuk | <i>Estimation and classification for Positive Unlabelled data under selection bias</i> |
| 12:00–12:20 | David Rodríguez-Vítóres | <i>Improving Model Choice in Classification: An Approach Based on Clustering of Covariance Matrices.</i> |
| 12:20–12:40 | Johannes Resin | <i>From Classification Accuracy to Proper Scoring Rules: Elicitability of Probabilistic Top List Predictions</i> |

CS06. Model selection

[Room 1.40]

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|-------------|--------------------|------------------------------------------------------------------------------------------------------------|
| 11:00–11:20 | Stijn Jaspers | <i>Using the Probability of Improved Prediction for Model Selection in the Presence of Outliers</i> |
| 11:20–11:40 | Paweł Teisseyre | <i>Cost-constrained group variable selection using information theory</i> |
| 11:40–12:00 | Piotr Pokarowski | <i>Worst-case optimality of the Risk Inflation Criterion for prediction and selection in linear models</i> |
| 12:00–12:20 | Georg Köstenberger | <i>Universality of AIC, FPE and beyond</i> |
| 12:20–12:40 | Ingrid Dæhlen | <i>Accurate bias estimation with applications to focused model selection</i> |

CS07. Monte Carlo methods

[Room 2180]

11:00–11:20	Samuel Livingstone	<i>Pre-conditioning in Markov Chain Monte Carlo</i>
11:20–11:40	Marcin Baranek	<i>On performance the randomized Euler algorithm under inexact information</i>
11:40–12:00	Aigerim Zhuman	<i>Speeding up Monte Carlo integration: nearest neighbour estimates as control variates</i>
12:00–12:20	Michał Sobieraj	<i>On multilevel Monte Carlo algorithm for SDEs driven by countably dimensional Wiener process and Poisson random measure</i>

CS08. Nonparametrics 1

[Room 5440]

11:00–11:20	Stanislav Anatolyev	<i>Nonparametric regression with clustered observations</i>
11:20–11:40	Anouar Meynaoui	<i>Adaptive estimation in the functional linear model with functional output</i>
11:40–12:00	Guohao Shen	<i>Nonparametric Estimation of Non-Crossing Quantile Regression Process with Deep ReQU Neural Networks</i>
12:00–12:20	Juan Carlos Pardo-Fernandez	<i>Estimating the shape functions</i>

12:30–14:00 Lunch**14:00–15:40 Invited and Contributed Sessions****IS08. Fairness**

[Room 0.06]

Session organizer and chair: Nicolas Schreuder

14:00–14:30	Patrick Loiseau	<i>Statistical discrimination in selection and matching</i>
14:30–15:00	Nicolas Schreuder	<i>A minimax framework for quantifying risk-fairness trade-off in regression</i>
15:00–15:30	Evgenii Chzhen	<i>Small Total-Cost Constraints in Contextual Bandits with Knapsacks, with Application to Fairness</i>

IS18. Latent variable models

[Room 0.03]

Session organizer: Elisabeth Gassiat

Session chair: Aurore Delaigle

14:00–14:30	Aurore Delaigle	<i>Latent variables in measurement error problems with excess zeros</i>
14:30–15:00	Luc Lehericy	<i>Deconvolution with unknown noise distribution and support inference</i>
	Elisabeth Gassiat	<i>(cancelled) Clustering and non parametric hidden Markov models</i>

CS09. Bayesian methods 2

[Room 1.01]

14:00–14:20	Sandra Fortini	<i>Prediction-based uncertainty quantification in learning models</i>
14:20–14:40	Andrej Srakar	<i>Approximate Bayesian algorithm for tensor robust PCA using relative entropy</i>
14:40–15:00	Priyantha Wijayatunga	<i>Modelling Predictive Uncertainty in Probabilistic and Black-box Models</i>
15:00–15:20	Łukasz Kwiatkowski	<i>Bayesian ex Post Evaluation of Recursive Multi-Step-Ahead Density Prediction</i>

CS10. Functional Data Analysis

[Room 1.40]

- 14:00–14:20 Jeanine Houwing
Duistermaat *A novel functional model for temporal images*
- 14:20–14:40 Valentina Masarotto *Covariance-based soft clustering of functional data based on the Wasserstein-Procrustes metric*
- 14:40–15:00 Christoph Reihl *Confidence bands for the covariance kernel of Banach space valued functional data*
- 15:00–15:20 Ke Yu *Riemannian Functional Regression and Reproducing Kernel Tensor Hilbert Spaces*

CS11. High-dimensional 2

[Room 2180]

- 14:00–14:20 Jing Zhou *Testing heteroscedasticity for high dimensional expectile regression*
- 14:20–14:40 Daniel Garcia
Rasines *More powerful universal post-selection inference*
- 14:40–15:00 Gianluca Finocchio *Iterative regularization methods for ill-posed generalized linear models*
- 15:00–15:20 Beryl Ang'iro *Sample Splitting techniques for high dimensional Multivariate Survival data*

CS12. Networks 1

[Room 5440]

- 14:00–14:20 Catherine Matias *Model-based clustering in simple hypergraphs through a stochastic block-model*
- 14:20–14:40 Alexander Kreiss *Testing For Global Covariate Effects in Dynamic Interaction Event Networks*
- 14:40–15:00 Karol Opara *Quantifying the stability and vulnerability of ecological networks*
- 15:00–15:20 Anastasia Mantziou *A network autoregressive model for networks with time-varying edge weights*

CS13. Order statistics 1

[Room 4420]

- 14:00–14:20 Jorge Navarro *Are the order statistics ordered?*
- 14:20–14:40 Tomasz Rychlik *Necessary and sufficient conditions for existing moments of generalized order statistics*
- 14:40–15:00 Agnieszka Goroncy *Bounds on expectations of spacings from DRFR distributions*

15:30–16:00 Coffee break

16:00–18:00 Poster Session

[Faculty of Physics, 1st floor]

Timo Braun	<i>A modified dividing local Gaussian processes algorithm for theoretical particle physics applications</i>
Yun-Hee Choi	<i>A Shared Frailty Competing Risk Model with Time-varying Covariates: An application to Hereditary Breast and Ovarian Cancer Families</i>
Adam Chojecki	<i>Uncovering Data Symmetries: Estimating Covariance Matrix in High Dim Data Setting ($p > n$) With 'gips,' an R Package</i>
Johan de Aguas	<i>Causal effect identification under preferential selection: extended graphical criteria for regression adjustment via mediation analysis</i>
Christiana Drake	<i>Propensity Weighting in the Estimation of Direct Effects</i>
Nina Fischer	<i>Time series emulation of carbon cycle model simulations</i>
Glaura Franco	<i>GLARMA model and Bootstrap approaches: An application to respiratory diseases and air pollutants</i>
Niamh Graham	<i>Estimating periodicity in disease dynamics</i>
Krystyna Grzesiak	<i>Imputomics: comprehensive missing data imputation for metabolomics data</i>
Tom Guédon	<i>Bootstrap test for variance components in nonlinear mixed effects models for small sample size in presence of nuisance parameters and singular Fisher Information Matrix</i>
Kai Hencken	<i>Evaluation of Different Sequential Testing Strategies applied to Dielectric Breakdown Requirements of a Batch of High-Voltage Devices</i>
Tomasz Hołyński	<i>Parameter estimation based on differential equations of empirical transforms</i>
Shimeng Huang	<i>Causal change point detection and localization</i>
Vera Kvisgaard	<i>Bayesian estimation of causal effects from observational discrete data</i>
Claudio Meggio	<i>Pattern Boosting, a statistical learning method for chemistry applications</i>
Puchong Paophan	<i>Functional data analysis for time-varying networks</i>
Savita Pareek	<i>Likelihood-based Inference for Skewed Responses in a Crossover Trial Setup</i>
Junhyung Park	<i>Towards a Measure-Theoretic Axiomatisation of Causality</i>
Łukasz Rajkowski	<i>Local Dependence Graphs for Discrete Time Processes</i>
Thibault Randrianarisoa	<i>Deep Horseshoe Gaussian processes</i>
Luisa Fernanda Rodriguez Carrillo	<i>Continuous capture process based on advection-diffusion-reaction models within Joint species movement modelling</i>
Mateusz Staniak	<i>Statistical methods for the analysis of mass spectrometry data with multiple membership</i>
Luciano Telesca	<i>Visibility graph analysis of the reservoir-triggered seismicity at Pertusillo lake, Southern Italy</i>
Ekaterina Tomilina	<i>Gaussian copula estimation for heterogeneous data</i>
Andrzej Tomski	<i>Linear mixed models in biology and medicine</i>
Lu Yu	<i>Mirror Descent Strikes Again: Optimal Stochastic Convex Optimization under Infinite Noise Variance</i>
Huizi Zhang	<i>Incorporating covariates in single-cell clustering with dependent hierarchical Dirichlet processes</i>

18:00–20:00 The New Researchers Meeting

09:30–10:30 Forum Lecture, part 1

[Room 0.03]

Session chair: Judith Rousseau

G rard Biau

*Recurrent and Residual Neural Networks as differential equations***10:30–11:00 Coffee break****11:00–12:40 Invited and Contributed Sessions****IS02. Network inference and causality**

[Room 0.03]

Session organizer and chair: Veronica Vinciotti

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|-------------|------------------|--------------------------------------------------------------------------------------|
| 11:00–11:30 | Francesco Stingo | <i>Bayesian Covariate-Dependent Gaussian Graphical Models with Varying Structure</i> |
| 11:30–12:00 | Ernst Wit | <i>Causal regularization</i> |
| 12:00–12:30 | Sara Magliacane | <i>Causality-inspired ML: what can causality do for ML?</i> |

IS03. Theory for Bayesian nonparametrics

[Room 0.06]

Session organizer and chair: St phanie van der Pas

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|-------------|------------------|--------------------------------------------------------------------------------------------------------------|
| 11:00–11:30 | Natalia Bochkina | <i>Semi-parametric Bernstein-von Mises theorem for linear models with one-sided error</i> |
| 11:30–12:00 | Sonia Petrone | <i>Frequentist coverage of Bayesian credible intervals: a predictive matter?</i> |
| 12:00–12:30 | Lasse Vuursteen | <i>Single coordinate semi-parametric Bernstein-von-Mises theorems for high-dimensional linear regression</i> |

CS14. Change-point analysis

[Room 1.01]

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|-------------|-----------------|-------------------------------------------------------------------------------------------------------------------------|
| 11:00–11:20 | Fabio Kalix | <i>Inadmissibility of classical sharp minimax tests in high dimensional change point analysis</i> |
| 11:20–11:40 | Ziyang Yang | <i>Detecting changes in a distributed system in real time with unknown parameters: from Gaussian to mixed-type data</i> |
| 11:40–12:00 | Per August Moen | <i>High-dimensional change point estimation using thresholded CUSUM statistics</i> |

CS15. Dependence modelling

[Room 1.40]

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|-------------|----------------------|---------------------------------------------------------------------------------------------------------|
| 11:00–11:20 | Wicher Bergsma | <i>Selecting interaction effects in regression using I-priors</i> |
| 11:20–11:40 | Jean-David Fermanian | <i>Sparse M-estimators in semi-parametric copula models</i> |
| 11:40–12:00 | Jaroslav Harezlak | <i>Biclustering Multivariate Longitudinal Data with Application to a Diffusion Tensor Imaging Study</i> |

CS16. Modelling

[Room 2180]

11:00–11:20	Apostolos Batsidis	<i>Size biased samples when modelling extreme phenomena: statistical inference and applications</i>
11:20–11:40	Tomasz Burzykowski	<i>A varying-coefficient beta-binomial model for the analysis of DNA-methylation sequencing data</i>
11:40–12:00	Habib Ganjgahi	<i>Scalable Hierarchical Bayesian Model for Multiple Sclerosis Progression using Brain Imaging and Clinical Features</i>
12:00–12:20	Luiza Piancastelli	<i>Clustered Mallows Model</i>
12:20–12:40	Chrysoula Ganatsiou	<i>On birth-death circuit chains in fixed environments: analysis of a generalized sample path case</i>

CS17. Probability and stochastic processes 1

[Room 5440]

11:00–11:20	Adam Osękowski	<i>Inequalities for martingale transforms with unbounded coefficients</i>
11:20–11:40	Łukasz Dębowski	<i>Universal densities for stationary processes</i>
11:40–12:00	Jüri Lember	<i>Classification with pairwise Markov models</i>
12:00–12:20	Tomasz Kozubowski	<i>Weighted distributions, random truncation, and partial extremes</i>
12:20–12:40	Alicja Jokiel-Rokita	<i>Prediction for the Weibull-power law process</i>

CS18. Survival analysis

[Room 4420]

11:00–11:20	Ewa Strzalkowska-Kominiak	<i>Testing single-index model under censoring</i>
11:20–11:40	Adrián Lago	<i>Smooth k-sample tests under left truncation</i>
11:40–12:00	Mahmoud Bentriou	<i>Risk estimation of late radio-induced cardiac disease in childhood cancer survivors.</i>
12:00–12:20	Mirko Signorelli	<i>Handling many longitudinal predictors in survival analysis: a penalized regression calibration approach</i>
12:20–12:40	Myrthe D'Haen	<i>Copula based quantile modelling under dependent censoring</i>

12:30–14:00 Lunch**14:00–15:00 Forum Lecture, part 2**

[Room 0.03]

Session chair: Judith Rousseau

Gérard Biau

*Recurrent and Residual Neural Networks as differential equations***15:30–16:00 Coffee break****16:30–19:00 Excursion**

09:30–10:30 Special Invited Lecture

[Room 0.03]

Session chair: Sonia Petrone

Jonas Peters

*Invariance in practice: dynamical systems
and falsifiability*

10:30–11:00 Coffee break

11:00–12:40 Invited and Contributed Sessions

IS10. Complex network methods for complex real data

[Room 0.06]

Session organizer: Clelia di Serio

Session chair: Chiara Brombin

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|-------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 11:00–11:30 | Spyros Balafas | <i>Comparing Communication Strategies with Networks
Estimated From Hierarchical EEG Data</i> |
| 11:30–12:00 | Lorenzo Giammei | <i>Integrating causal Bayesian networks and potential
outcomes to evaluate the effect of home-based working
on italian firms</i> |
| 12:00–12:30 | Rūta Juozaitienė | <i>A framework for relational event modelling</i> |

IS13. Recent advances in high-dimensional inference

[Room 0.03]

Session organizer and chair: Eduard Belitser

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|-------------|-------------------|------------------------------------------------------------------------------------------------------|
| 11:00–11:30 | Eduard Belitser | <i>Bayesian UQ and structure detection for multiple
change-points models</i> |
| 11:30–12:00 | Subhashis Ghoshal | <i>Unified convergence theory for Bayesian sparse linear
regression with nuisance parameters</i> |
| 12:00–12:30 | Deborah Sulem | <i>Scalable variational Bayes methods for multivariate
point processes</i> |

CS19. Graphical models

[Room 1.01]

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|-------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 11:00–11:20 | Jacek Wesolowski | <i>Parametric discrete Bayesian graphical models</i> |
| 11:20–11:40 | Konrad Furmańczyk | <i>A non-parametric construction and learning method of
a graphical model</i> |
| 11:40–12:00 | Bartosz Kołodziejek | <i>Bayesian model selection in the space of Gaussian
models invariant by permutation symmetry</i> |
| 12:00–12:20 | Eftychia Solea | <i>Joint estimation of heterogeneous non-Gaussian
functional graphical models with fully and partially
observed curves</i> |
| 12:20–12:40 | Ensiyeh Nezakati | <i>False discovery rate control using debiased graphical
Lasso in Gaussian graphical models</i> |

CS20. Nonparametrics 2

[Room 1.40]

11:00–11:20	Bianca Neubert	<i>Adaptive testing for multiplicative convolution</i>
11:20–11:40	Jonas Beck	<i>Almost Omnibus Nonparametric Inference for Two Independent Samples</i>
11:40–12:00	Guangyong Zou	<i>Nonparametric methods for randomized controlled trials with multiple endpoints: Beyond O'Brien-Wei-Lachin</i>
12:00–12:20	Alexander Dürre	<i>Affine-equivariant inference for multivariate location under L_p loss functions</i>
12:20–12:40	Luis González-De La Fuente	<i>Simplicial depths in the fuzzy setting</i>

CS21. Regression

[Room 2180]

11:00–11:20	Bernhard Stankewitz	<i>Early stopping for L_2-boosting in high-dimensional linear models</i>
11:20–11:40	Georg Keilbar	<i>A semiparametric approach for interactive fixed effects panel data models</i>
11:40–12:00	Lorenzo Tedesco	<i>Treatment Effect in a Proportional Hazards Model with Instrumental Variables</i>
12:00–12:20	Yan Gong	<i>Causal Spatial Quantile Regression</i>

CS22. Time Series 1

[Room 5440]

11:00–11:20	Mirosław Pawlak	<i>Nonparametric Inference from Level Crossings for Time Warping Deformation Models</i>
11:20–11:40	Wagner Barreto-Souza	<i>Nearly Unstable Integer-Valued ARCH Process and Unit Root Testing</i>
11:40–12:00	Sven Pappert	<i>Introducing a Moving Aggregate to Copula-based Time Series Models to allow for Infinite Autoregressive Order</i>

12:30–14:00 Lunch**14:00–15:40 Invited and Contributed Sessions****IS09. Inverse problems**

[Room 0.03]

Session organizer and chair: Alexander Goldenshluger

14:00–14:30	Anatoli Juditsky	<i>GLM's for time series by convex programming</i>
14:30–15:00	Mathias Trabs	<i>Dispersal density estimation across scales</i>
15:00–15:30	Alexander Goldenshluger	<i>Statistical problems for Smoluchowski processes</i>

IS15. New developments in learning algorithms

[Room 0.06]

Session organizers: Alain Durmuis, Błażej Miasojedow

Session chair: Błażej Miasojedow

14:00–14:30	Gersende Fort	<i>TBA</i>
14:30–15:00	Aurelien Lucchi	<i>On the Properties of Noise Injection in Stochastic Optimization</i>
15:00–15:30	Sean Meyn	<i>Curse of Markovian Memory in Recursive Algorithms</i>

CS23. Asymptotic statistics

[Room 1.01]

14:00–14:20	Gitte Kremling	<i>Bootstrap-based goodness-of-fit test for parametric generalized linear models under random censorship</i>
14:20–14:40	Igor Rodionov	<i>Quantile estimation for maxima of stationary sequence by the block quantile method</i>
14:40–15:00	Małgorzata Łazęcka	<i>Resampling methods in conditional independence testing</i>
15:00–15:20	Gildas Mazo	<i>Optimizing the mean-squared error of nested Monte Carlo estimators with application to sensitivity analysis</i>
15:20–15:40	Jan Rabe	<i>A Central Limit Theorem for Centered Purely Random Forests using U-Statistic Theory</i>

CS24. Causal inference 1

[Room 1.40]

14:00–14:20	Stijn Vansteelandt	<i>i-learner: an orthogonal learner of the conditional counterfactual outcome mean with output space constraints</i>
14:20–14:40	Mats Stensrud	<i>Causal effects of intervening variables in settings with unmeasured confounding</i>
14:40–15:00	Wojciech Niemiro	<i>Conditional Independence for Continuous Time Bayesian Networks</i>
15:00–15:20	Paweł Morzywołek	<i>On a General Class of Orthogonal Learners for the Estimation of Heterogeneous Treatment Effects</i>
15:20–15:40	Daniela Schkoda	<i>Goodness-of-fit tests for non-Gaussian linear causal models</i>

CS25. Estimation/testing

[Room 2180]

14:00–14:20	Peter Harremoës	<i>Reverse Information Projections and Optimal E-Statistics</i>
14:20–14:40	Krzysztof Bogdan	<i>Maximum likelihood estimation for discrete exponential families and random graphs</i>
14:40–15:00	Przemysław Grzegorzewski	<i>Nonparametric tests for imprecise data analysis</i>
15:00–15:20	Constantinos Petropoulos	<i>Estimating location parameters of two exponential distributions with ordered scale parameters</i>
15:20–15:40	Grzegorz Wyłupek	<i>Verifying the validity of exponentiality</i>

CS26. Penalized estimation

[Room 5440]

14:00–14:20	Ulrike Schneider	<i>Pattern Recovery in Penalized Estimation and its Geometry</i>
14:20–14:40	Tomasz Skalski	<i>Pattern recovery by SLOPE</i>
14:40–15:00	Ivan Hejny	<i>Weak pattern convergence for SLOPE and its robust versions</i>
15:00–15:20	Małgorzata Bogdan	<i>Sparse Graphical Modelling via the Sorted L-Norm</i>

15:30–16:00 Coffee break

16:00–17:40 Invited and Contributed Sessions

IS12. Advances in functional depth measures

[Room 0.06]

Session organizer: Laura Maria Sangalli

Session chair: Stanislav Nagy

16:00–16:30	Pavlo Mozharovskyi	<i>On polynomial-time algorithms for data depths</i>
16:30–17:00	Stanislav Nagy	<i>Statistical depth in machine learning: Kernel mean embeddings in functional data analysis</i>
17:00–17:30	Sara Lopez-Pintado	[virtual] <i>On data depth for object data</i>

IS14. Federated Learning

[Room 1.01]

Session organizer and chair: Kerrie Mengersen

16:00–16:30	Conor Hassan	<i>Federated Learning of Structured Probabilistic Models</i>
16:30–17:00	Samuel Kaski	<i>From embarrassingly parallel learning to minimally coordinated distributed Bayesian data analysis</i>
17:00–17:30	Marco Lorenzi	<i>Federated learning in medical applications: from theory to practice</i>

IS17. Statistical inference for stochastic processes

[Room 0.03]

Session organizer and chair: Mark Podolskij

16:00–16:30	Denis Belomestny	<i>Statistical inference for coupled McKean-Vlasov SDEs</i>
16:30–17:00	Mark Podolskij	<i>On Lasso estimator for the drift function in diffusion models</i>
17:00–17:30	Claudia Strauch	<i>Change point estimation for a stochastic heat equation</i>

CS27. Causal inference 2

[Room 1.40]

16:00–16:20	Lucas Kook	<i>Invariant causal prediction for non-additive noise models</i>
16:20–16:40	Krzysztof Rudaś	<i>Logistic regression for uplift modeling</i>
16:40–17:00	Georgi Baklcharov	<i>Assumption-Lean Quantile Regression</i>
17:00–17:20	Gilles Crommen	<i>Estimation of the complier causal hazard ratio under dependent censoring</i>
17:20–17:40	Christopher Aldous Oldnall	<i>Mendelian Randomisation: Why Do We Need to Talk About Pleiotropy</i>

CS28. Computational statistics

[Room 2180]

16:00–16:20	Luis Angel García-Escudero	<i>Choice of input parameters in robust clustering</i>
16:20–16:40	Marcelo Hartmann	<i>Warped metrics for optimisation and sampling in probabilistic models</i>
16:40–17:00	Atila Göktaş	<i>Evaluation of Some Ridge Parameter Estimators in Logistic Regression Based on MSE and Skewness Criteria</i>
17:00–17:20	Lars Henry Berge Olsen	<i>Techniques for Estimating Conditional Shapley Values and When to Use Them</i>

CS29. Finance and risk

[Room 4420]

16:00–16:20	Gunnar Rosenqvist	<i>Modeling ultra-high frequency trade durations with ACD type of models</i>
16:20–16:40	Markus Belfrage	<i>Machines don't go for lunch: A new diurnal adjustment for trade durations</i>
16:40–17:00	Jakob Söhl	<i>Spectral Calibration of Time-Inhomogeneous Exponential Lévy Models</i>
17:00–17:20	Roberto Morales-Arsenal	<i>GAMLSS models to explain and predict the length of hospital stays caused by climate change and its effects on health insurance sector</i>

19:30– Conference Dinner

[75 Koszykowa Street]

(assembly hall of the Faculty of Physics, Warsaw University of Technology)

09:30–10:30 EMS Lecture

[Room 0.03]

Session chair: Gérard Biau

Arnaud Doucet

*From Denoising Diffusion Models to
Dynamic Transport Models – Generative
Modeling and Inference*

10:30–11:00 Coffee break

11:00–12:40 Invited and Contributed Sessions

IS11. Robustness sensitivity and uncertainty of statistical estimation

[Room 0.03a]

Session organizer and chair: Fanny Yang

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|-------------|----------------|-------------------------------------------------------------------------------------------|
| 11:00–11:30 | Carlos Cinelli | [virtual] <i>Long Story Short: Omitted Variable Bias in Causal Machine Learning</i> |
| 11:30–12:00 | Nicola Gnecco | <i>Distribution generalization in semi-parametric models: A control function approach</i> |
| 12:00–12:30 | Yingzhen Li | <i>Bayesian Deep Learning via Function-space Posterior Inference</i> |

IS16. Centennials of important events in the Probability Theory

[Room 0.03]

Session organizer and chair: Adam Jakubowski

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|-------------|------------------|--------------------------------------------------------------|
| 11:00–11:30 | Aleksander Weron | <i>Contributions of Hugo Steinhaus to Probability Theory</i> |
| 11:30–12:00 | Rene Schilling | <i>Celebrating 100 Years of Wiener Space</i> |
| 12:00–12:30 | Adam Jakubowski | <i>Convergence in law of stochastic processes</i> |

CS30. Networks 2

[Room 1.01]

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|-------------|---------------------|--------------------------------------------------------------------------------------------|
| 11:00–11:20 | Mindaugas Bloznelis | <i>Approximate subgraph count: asymptotic normality and jackknife estimate of variance</i> |
| 11:20–11:40 | Corinne Emmenegger | <i>Plugin Machine Learning for Treatment Effect Estimation on Networks</i> |

CS31. Order statistics 2

[Room 1.40]

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|-------------|----------------------|---------------------------------------------------------------------------------------------------|
| 11:00–11:20 | Mariusz Bieniek | <i>L-statistics as quantile estimators</i> |
| 11:20–11:40 | Magdalena Szymkowiak | <i>Some properties of generalized aging and reversed aging intensity functions</i> |
| 11:40–12:00 | Krzysztof Jasiński | <i>The number of failed components in a coherent system and its application to optimal design</i> |

CS32. Time Series 2

[Room 2180]

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|-------------|------------------------|---------------------------------------------------------------------------------|
| 11:00–11:20 | Łukasz Lenart | <i>A stationary non-linear time series model with multiple frequencies</i> |
| 11:20–11:40 | Ana Martins | <i>Space-time moving average models for time series of counts</i> |
| 11:40–12:00 | Karolina Klockmann | <i>Efficient nonparametric estimation of Toeplitz covariance matrices</i> |
| 12:00–12:20 | Elżbieta Gajecka-Mirek | <i>Applying Functional Data Analysis to periodically correlated time series</i> |
| 12:20–12:40 | Maddie Smith | <i>Forecast Combination Through Dynamic Linear Models</i> |

CS33. Topological data analysis [Room 5440]

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|-------------|------------------|------------------------------------------------------------------------------------------|
| 11:00–11:20 | Paweł Dlotko | <i>Mapper algorithms - how to visualize your data, even if they are high dimensional</i> |
| 11:20–11:40 | Jan Felix Senge | <i>Classification of materials using Topological Data Analysis</i> |
| 11:40–12:00 | Rafał Topolnicki | <i>Multivariate goodness of fit tests based on topological data summaries</i> |

12:30–14:00 Lunch

14:00–15:40 Invited and Contributed Sessions

IS05. Computational statistics [Room 0.03]

Session organizer and chair: Anthony Lee

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|-------------|-------------|-----------------------------------------------------------------------------------------------------------------------------|
| 14:00–14:30 | Yuansi Chen | [virtual] <i>When does Metropolized Hamiltonian Monte Carlo provably outperform Metropolis-adjusted Langevin algorithm?</i> |
| 14:30–15:00 | Anthony Lee | <i>Explicit convergence bounds for Metropolis Markov chains</i> |
| 15:00–15:30 | Sven Wang | <i>On polynomial-time mixing of MCMC for high-dimensional posterior distributions</i> |

CS34. Design and optimisation [Room 1.01]

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|-------------|---------------------|------------------------------------------------------------------------------------------------|
| 14:00–14:20 | Satya Prakash Singh | <i>Bayesian Optimal Stepped Wedge Design</i> |
| 14:20–14:40 | Milena Bieniek | <i>Supply chain contracts with returns handling under price-sensitive stochastic demand</i> |
| 14:40–15:00 | Arpan Singh | <i>Optimal designs for testing pairwise differences: a graph based game theoretic approach</i> |

CS35. Stochastic Differential Equations [Room 0.06]

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|-------------|---------------------|------------------------------------------------------------------------------------------------------|
| 14:00–14:20 | Camilla Damian | <i>Statistical Inference for Rough and Persistent Volatility</i> |
| 14:20–14:40 | Krzysztof Bartoszek | <i>Inference for multivariate branching Ornstein-Uhlenbeck processes</i> |
| 14:40–15:00 | Luca Gonzato | <i>Controlled Sequential Monte Carlo Methods for Continuous-Time Diffusion Models</i> |
| 15:00–15:20 | Martyna Wiącek | <i>How to estimate time-dependent parameters in SDEs-based models via artificial neural networks</i> |

15:30–16:00 Coffee break

16:00–17:00 Closing Lecture [Room 0.03]

Session chair: Fanny Yang

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|------------------|---------------------------------------------------------------------------------------------|
| Marta Blangiardo | <i>Spatio-temporal Bayesian models for environmental epidemiology: methods and examples</i> |
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17:00–17:30 Closing Ceremony [Room 0.03]