Méthodes Mathématiques en Statistiques Modernes 3
Mathematical Methods of Modern Statistics 3
27 June-1 July, 2022

Monday	**27 June 2022**
9:00 - 9:30	Stein's unbiased risk estimate and an adaptive singular value shrinkage for estimation problem of low-rank matrix mean with unknown covariance matrix *Yoshihiko Konno*
9:30 - 10:00	Gaussian Whittle Matérn fields on metric graphs *Jonas Wallin*
10:00 - 10:30	Asymptotic expansion of the expected Minkowski functional for isotropic central limit random fields *Satoshi Kuriki*
10:30 - 10:50	Coffee break
10:50 - 11:20	Noise-Induced Randomization in Regression Discontinuity Designs *Stefan Wager*
11:20 - 11:50	Duality of exponential families and large deviations *Gérard Letac*
11:50 - 12:20	Meta-Learning Representations with Contextual Linear Bandits *Karim Lounici*
12:30 - 14:00	Lunch
17:00 - 17:20	A Sparsity Inducing Nuclear-Norm Estimator (SpINNEr) for Matrix-Variate Regression in Brain Connectivity Analysis *Jaroslaw Harezlak*
17:20 - 17:50	Discrete parametric Bayesian graphical models *Jacek Wesolowski*
17:50 - 18:20	Coffee break
18:20 - 18:50	Hierarchical Bayes modeling for high-dimensional linear regression *Daniel Yekutieli*
18:50 - 19:20	On the inference of hidden Markov models with weakly informative observations *Matti Vihola*
Tuesday	**28 June 2022**
9:00 - 9:30	Replicability issues in medical research : Science, Math and Politics *Yoav Benjamini*
9:30 - 10:00	When Will You Become the Best Reviewer of Your Own Papers ? An Owner-Assisted Approach to Mechanism Design *Weijie Su*
10:00 - 10:30	Random-label models for evaluating highly multi-class classification tasks *Yuval Benjamini*
10:30 - 11:00	Coffee break
11:00 - 11:30	Multiple testing of partial conjunction null hypotheses *Ruth Heller*
11:30 - 12:00	Post hoc inference for genomics and neuroimaging *Pierre Neuvial*
12:00 - 12:20	Online Multiple Testing with Super Uniformity Reward *Iqraa Meah*
12:30 - 14:00	Lunch
17:00 - 17:30	Implicit Differentiation in Non-Smooth Convex Learning *Quentin Bertrand*
17:30 - 18:00	A phase transition for finding needles in nonlinear haystacks with LASSO artificial neural networks *Sylvain Sardy*
18:00 - 18:30	Coffee break
18:30 - 19:00	Graph Neural Networks on Large Random Graphs *Samuel Vaiter*
19:00 - 19:20	Distribution-free uncertainty quanti cation (for time series) *Margaux Zaffran*

Wednesday	**29 June 2022**
9:00 - 9:30	Controlled Discovery and Localization of Signals via Bayesian Linear Programming (BLiP) *Lucas Janson*
9:30 - 10:00	Game-theoretic statistics and safe, anytime-valid inference *Aaditya Kumar Ramdas*
10:00 - 10:30	Optimality in statistical inference for permutation invariant problems *Asaf Weinstein*
10:30 - 11:00	Coffee break
11:00 - 11:30	Testing hypotheses on a tree with FDR control for the highest resolution discoveries *Marina Bogomolov*
11:30 - 12:00	FDR meets classi cation with BONuS *Etienne Roquain*
12:00 - 12:20	False clustering rate control in mixture models *Ariane Marandon-carlhian*
12:30 - 14:00	Lunch
Thursday	**30 June 2022**
9:00 - 9:30	The Kick-Kac teleportation algorithm : boost your favorite Markov Chain Monte Carlo using Kac formula *Alain Durmus*
9:30 - 10:00	Particle MCMC with Poisson resampling *Blazej Miasojedow*
10:00 - 10:30	Integrating Data Correlations into Modern Predictive Modeling *Saharon Rosset*
10:30 - 10:50	Coffee break
10:50 - 11:20	Is interpolation benign in random forest regression ? *Claire Boyer*
11:20 - 11:50	A geometrical viewpoint on the benign over tting property of the minimum $\ell 2$-norm interpolant estimator in linear regression *Guillaume Lecué*
11:50 - 12:20	Multiclass high-dimensional classification by sparse linear classifiers *Felix Abramovich*
12:30 - 14:00	Lunch
17:00 - 17:20	Large covariance estimation by penalized log-det minimization *Matteo Farnè*
17:20 - 17:50	The geometry of uniqueness and pattern detection in penalized and thresholded estimation *Ulrike Schneider*
17:50 - 18:20	Coffee break
18:20 - 18:40	Model selection in the space of Gaussian models invariant by symmetry *Bartosz Kołodziejek*
18:40 - 19:00	Pattern Recovery by SLOPE in orthogonal and asymptotic design *Tomasz Skalski*
19:00 - 19:20	Pattern recovery by SLOPE *Patrick Tardivel*
Friday	**1 July 2022**
9:00 - 9:30	Stochastic Online Convex Optimization : Application to probabilistic time series forecasting *Olivier Wintenberger*
9:30 - 10:00	Sparse Graphical Modelling via the Sorted L1-Norm *Malgorzata Bogdan*
10:00 - 10:30	Efficient and consistent data-driven model selection for time series *Jean-Marc Bardet*
10:30 - 11:00	Coffee break
11:00 - 11:20	Group Lasso Merger For Sparse Prediction With High-dimensional Categorical Data *Piotr Pokarowski*
11:20 - 11:40	Model selection with high-dimensional categorical data *Wojciech Rejchel*

12:30 - 14:00	Lunch