



Workshop on

# — Mathematical Statistics in the Information Age

Statistical efficiency and computational tractability

Freiburg, March 30 – 31, 2023

## Thursday, March 30, 2023

- 09:00 – 09:45 **Victor Panaretos** (EPFL, Switzerland)  
The extrapolation of correlation
- 09:45 – 10:15 *Coffee break*
- 10:15 – 11:00 **Chao Gao** (University of Chicago, USA)  
Detection and recovery of sparse signal under correlation
- 11:00 – 11:45 **Alexander Aue** (UC Davis, USA)  
Testing high-dimensional general linear hypotheses under a multivariate regression model with spiked noise covariance
- 11:45 – 13:00 *Lunch break*
- 13:00 – 13:45 **Mathias Drton** (Technical University of Munich, Germany)  
Testing many possibly irregular polynomial constraints
- 13:45 – 14:30 **Peter Bühlmann** (ETH Zurich, Switzerland)  
Deconfounding and well-specification
- 14:30 – 15:00 *Coffee break*
- 15:00 – 15:45 **Kolyan Ray** (Imperial College London, UK)  
Bayesian estimation in a multidimensional diffusion model with high frequency data

## Friday, March 31, 2023

- 09:00 – 09:45 **Yuta Koike** (University of Tokyo, Japan)  
High-dimensional bootstrap and asymptotic expansion: A first attempt
- 09:45 – 10:30 **Stefan Richter** (University of Heidelberg, Germany)  
Empirical process theory and oracle inequalities for (non-)stationary processes
- 10:30 – 11:00 *Coffee break*
- 11:00 – 11:45 **Aurore Delaigle** (University of Melbourne, Australia)  
Estimating a prevalence in group testing problems with missing values
- 11:45 – 12:30 **Ingo Steinwart** (University of Stuttgart, Germany)  
Density-based cluster analysis

The workshop is sponsored by the DFG Research Unit 5381

<https://for5381.uni-freiburg.de/>

### Venue

University of Freiburg, Natural Sciences Campus ("Institutsviertel")  
Lecture Hall at the Crystallography, Hermann-Herder-Str. 5, 79104 Freiburg i. Br., Germany

### Registration

The workshop has no fees. Registration is possible by e-mail to [sekretariat@stochastik.uni-freiburg.de](mailto:sekretariat@stochastik.uni-freiburg.de), but not required.

<https://for5381.uni-freiburg.de/en/talks-and-news/>

Albert-Ludwigs-Universität Freiburg