Mathematical Statistics with Applications in Mind

CIRM, December 9 – 13, 2013

Monday, December, 9:

Morning Session

- 09:00–09:10 Welcome
- 09:10–10:10 Sébastien Roch (University of Wisconsin)
  Assembling the "Tree" of Life: More Data, More Problems, Part I.
- 10:10–10:30 Break
- 10:30–11:15 Sara van de Geer (ETH Zürich)
  On the Uniform Convergence of Empirical Norms and Inner Products, with Application to Causal Inference.
- 11:15–12:00 Alexander Rakhlin (University of Pennsylvania)
  Uniform Martingale LLN with Applications to Sequential Prediction.

Evening Session

- 16:30–17:00 Maud Thomas (Université Paris 7)
  Concentration Inequalities for Order Statistics.
- 17:00–17:30 Richard Samworth (University of Cambridge)
  New Results on log-Concave Density Estimation.
- 17:30–18:00 Break
- 18:00–18:30 Alexander Goldenshluger (University of Haifa)
  On an $M/G/\infty$ Estimation Problem.
- 18:30–19:00 Constantine Caramanis (University of Texas, Austin)
  Crowd-Sourcing Epidemic Detection.

Tuesday, December, 10:

Morning Session

- 09:00–10:00 Sébastien Roch (University of Wisconsin)
  Assembling the "Tree" of Life: More Data, More Problems, Part II.
- 10:00–10:30 Break

- 10:30–11:15 Alexandre Tsybakov (CREST)
  A Linear Programming Approach to Estimation in High-Dimensional Errors-in-Variables Models.

- 11:15–12:00 Martin Wainwright (University of California, Berkeley)
  Privacy and Statistical Minimax: Quantitative Tradeoffs.

Evening Session

- 16:30–17:00 Vianney Perchet (Université Paris 7)
  Recent Advances and Applications of Blackwell's Approachability Theory.

- 17:00–17:30 Andreas Andresen (WIAS)
  Finite Sample Analysis of Maximum Likelihood Estimators.

- 17:30–18:00 Break

- 18:00–18:30 Maxim Raginsky (University of Illinois)
  Empirical Processes and Information Theory.

- 18:30–19:00 Moritz Jirak (Universität Humboldt)
  Adaptive Estimation in Non-Regular Nonparametric Regression.

Wednesday, December, 11:

- 9:00–9:45 Enno Mammen (Universität Mannheim)
  Expansions for Moments of Nonparametric Regression Quantiles with Applications to Nonparametric Testing.

- 9:45–10:30 Boaz Nadler (Weizmann Institute of Science)
  Continuous Goodness of Fit: Old Problem, (some) New Ideas.

- 10:30–11:00 Break

- 11:00–11:45 Eric Moulines (Telecom ParisTech)
  On Stochastic Proximal Gradient Algorithms.

- 11:45-12:30 Anatoli Juditsky (Université Joseph Fourier)
  Stochastic Optimization from Incomplete Information.

Thursday, December, 12:

Morning Session

- 9:00–10:00 Sylvain Arlot (Ecole Normale Supérieure)
  Optimal Data-Driven Estimator Selection with Minimal Penalties, Part I.
- 10:00–10:30 Break
- 10:30–11:15 Alexandre Belloni (Duke University)
  Honest Confidence Regions for a Regression Parameter in Logistic Regression with a Large Number of Controls.
- 11:15–12:00 Vladimir Koltchinskii (Georgia Tech)
  L_1-Penalization for Functional Linear Models with Gaussian Design: Sparsity Oracle Inequalities

Evening Session

- 16:30–17:00 Aurélien Garivier (Université Paul-Sabatier)
  Optimal Discovery with Probabilistic Expert Advice: Finite Time Analysis and Macroscopic Optimality.
- 17:00–17:30 Matan Gavish (Stanford University)
  Optimal Shrinkage of Singular values and Eigenvalues.
- 17:30–18:00 Break
- 18:00–18:30 Alexandra Carpentier (University of Cambridge)
  Testing the Regularity of a Smooth Signal.
- 18:30–19:00 Mihail Malyutov (Northeastern University)
  Theory and Applications of VLMC Based Time Series Homogeneity Tests.

Friday, December, 13:

- 9:00–10:00 Sylvain Arlot (Ecole Normale Supérieure)
  Optimal Data-Driven Estimator Selection with Minimal Penalties, Part II.
- 10:00–10:30 Zongming Ma (University of Pennsylvania)
  Estimating High-dimensional Matrices: Convex Geometry and Computational Barriers.
- 10:30–11:00 Break

- 11:00–11:30 Nicolas Verzelen (INRA)
  Unsupervised Classification of Sparse High-dimensional Vectors.
- 11:30–12:00 Franziska Göbel (Universität Potsdam)
  Graph-adapted Multiscale Tight Frames for Statistical Analysis.