

Conference and summer-school «Structural Inference in High-dimensional Models 2»

The conference will be held at the HSE University from August, 26 to August, 30, 2019.

Venue: HSE Management Training Center (Kochubey Mansion), 4 Radischeva Str., Pushkin, St. Petersburg, RUSSIA, 196602.

Mini-courses: Stephane Mallat, Mikhail Lifshitz, Olga Klopp, Christophe Andrieu

Sessions: Topics in MCMC (chair: Eric Moulines), Statistical Session (chair: Anatoli Juditsky), High-dimensional probability (chair: Alexey Naumov), Statistical Optimal Transport (chair: Vladimir Spokoiny).

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August 26

Time	Speaker	Title
08:00-9:15	Breakfast	
09:15-09:30	Welcome	
09:30-11:00	Stephan Mallat	Course: Mathematics of Deep Convolutional Neural Networks 1
11:00-11:30	Coffee break	
11:30-13:00	Mikhail Lifshitz	Course: How Complex is a Random Picture 1
13:00-14:40	Lunch	
14:40-15:20	Arnak Dalalyan	On sampling from a log-concave density using kinetic Langevin diffusions
15:20-16:00	Said Salem	Riemannian barycentres of Gibbs distributions: new results on concentration and convexity
16:00-16:30	Afternoon Tea	
16:30-17:10	Lukasz Szpruch	Mean-Field Langevin Dynamics and Energy Landscape of Neural Networks
17:10-17:50	Denis Belomestny	Variance-reduced Q-learning via martingale representations
18:00-19:30	Poster Session	
19:30-	Dinner	

August 27

Time	Speaker	Title
08:00-9:30	Breakfast	
09:30-11:00	Mikhail Lifshits	Course: How Complex is a Random Picture 2
11:00-11:30	Coffee break	
11:30-13:00	Stephan Mallat	Course: Mathematics of Deep Convolutional Neural Networks 2
13:00-14:40	Lunch	
14:40-15:20	Ildar Ibragimov	On the estimation of intensity density functions of Poisson processes
15:20-16:00	Alexander Tsybakov	Estimation of functionals in sparse vector model
16:00-16:30	Afternoon Tea	
16:30-17:10	Axel Munk	Empirical Optimal Transport: Inference, Algorithms, Applications
17:10-17:50	Anatoli Juditsky	On Polyhedral Estimation of Signals via Indirect Observations
17:50-18:30	Jing Bin Yi	Recommender system incorporating social network information
19:30-	Dinner	

August 28

Time	Speaker	Title
08:00-9:30	Breakfast	
09:30-10:10	Friedrich Götze	Concentration of Measure and Entropic Convergence
10:10-10:50	Nikita Zhivotovskiy	Noise sensitivity of the top eigenvector of random matrices
10:50-11:20	Coffee break	
11:20-12:00	Alexander Kolesnikov	Convexity and transportation: inequalities, barycenters, analysis on Wiener space
12:00-12:40	Dmitry Zaporozhets	Generalized Busemann inequality
13:00-14:40	Lunch and free time	

August 29

Time	Speaker	Title
08:00-9:30	Breakfast	
09:30-11:00	Olga Klopp	Course: Matrix Completion: old and new 1
11:00-11:30	Coffee break	
11:30-13:00	Christophe Andrieu	Course: Nonreversible Markov chain and process Monte Carlo methods 1
13:00-14:40	Lunch	
14:40-15:20	Marco Cuturi	Differentiable Ranks using Optimal Transport: The Sinkhorn CDF and Quantile Operator
15:20-16:00	Alexander Gasnikov	Acceleration of Sinkhorn algorithm for optimal transportation problem and Iterative Bregman Projection algorithm for Wasserstein barycenter problem
16:00-16:40	Alexey Kroshnin	Shape-based domain adaptation via optimal transportation
16:40-17:10	Afternoon Tea	
17:10-17:50	Alexandra Suvorikova	On some geometrical intuition on multiplier bootstrap in Bures-Wasserstein space
17:50-18:30	Eugene Stepanov	A tour of location problems: from optimal to random
20:00-	Conference dinner (started in the foyer at 19:30)	

August 30

Time	Speaker	Title
08:00-9:30	Breakfast	
09:30-11:00	Christophe Andrieu	Course: Nonreversible Markov chain and process Monte Carlo methods 2
11:00-11:30	Coffee break	
11:30-13:00	Olga Klopp	Course: Matrix Completion: old and new 2
	The End	
13:10-	Lunch and Discussion	