Probabilistic Methods in the Design and Analysis of Algorithms

Monday

9:15 – 9:30	Introduction	
9:30 – 10:30	Thomas Kesselheim	Secretary problems and prophet inequalities

Coffee Break

11:10 – 11:35	Luca Becchetti	Friend or foe? Population protocols can perform community detection
11:35 – 12:00	Benjamin Doerr	Randomized rumor spreading revisited

Lunch Break

16:00 – 16:25	Martin Dietzfelbinger	Dual-pivot quicksort: optimality, analysis and zeros of associated lattice paths
16:25 – 16:50	Robert Krauthgamer	Towards (1+ε)-approximate flow sparsifiers
16:50 – 17:15	Melanie Schmidt	Open problem: k-means++ in data streams

Tuesday

9:00 – 10:00	Leslie Ann Goldberg	t.b.a.

Coffee Break

10:45 – 11:10	Marc Uetz	Greedy Algorithms for Stochastic Unrelated Machine Scheduling
11:10 – 11:35	Frederik Mallmann-Trenn	Distance in the forest fire model – how far area you from Eve?
11:35 – 12:00	Claire Mathieu	Noisy skyline problem

Lunch Break

16:00 – 16:25	Stefan Klootwijk	Probabilistic analysis of facility location on random shortest path metrics
16:25 – 16:50	Andreas Pietracaprina	MapReduce and streaming algorithms for diversity maximization in metric spaces of bounded doubling dimension
16:50 – 17:15	Geppino Pucci	Efficient diameter approximation for large graphs in MapReduce

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Wednesday

9:00 – 10:00	Philipp Wölfel	Randomized shared memory algorithms

Coffee Break

10:45 – 11:10	Morteza Monemizadeh	Advances in streaming matching
11:10 – 11:35	Stefano Leonardi	Bayesian Mechanism Design for Two-sided Auctions
11:35 – 12:00	Amin Coja-Oghlan	Information-theoretic thresholds from the cavity method

Lunch Break and Hike

Thursday

9:00 – 10:00	Matteo Riondato	Rademacher averages

Coffee Break

10:45 – 11:10	Aravind Srinivasan	Dependent rounding
11:10 – 11:35	Thomas Sauerwald	On coalescence time in graphs – when is coalescing as fast as meeting?
11:35 – 12:00	Devdatt Dubhashi	Thompson sampling for stochastic bandits with graph feedback

Lunch Break

16:00 – 16:25	Alessandro Panconesi	LSD, the distortion of locality sensitive hashing
16:25 – 16:50	Seffi Naor	Correlated rounding of multiple uniform matroids and multi-label classification
16:50 – 17:15	Eli Upfal	t.b.a.

Friday

9:00 – 9:25	Daniel Dadush	Making Banaszczyk's Bound Constructive for the Komlos Problem
9:25 – 9:50	Ross Kang	t.b.a.
9:50 – 10:15	Dimitris Achlioptas	Stochastic Control via Entropy Compression

Coffee Break

11:00 – 11:25	Petra Berenbrink	t.b.a.
11:25 – 11:50	Heiko Röglin	Smoothed analysis of local search for Max-Cut
11:50 – 12:00	Wrap-up	

Lunch and Departure