

Dagstuhl Seminar 24391: Statistical and Probabilistic Methods in Algorithmic Data Analysis (Sep 22 – Sep 27, 2024)

Monday 9/23

7:30-8:45: Breakfast

9:15: Welcome + Introductions

9:35: Stefano Leonardi (Sapienza University of Rome), *Online Learning in markets: first price auctions and bilateral trade*

10:00: Geppino Pucci (University of Padova), *Drift-Adaptive Clustering of Streamed Data*

10:25: Coffee Break

11:00: Geoff Webb (Monash University), *Self-Sufficient Itemsets: A set of statistical constraints for discarding patterns that are unlikely to be interesting*

11:45: Ravi Kumar (Google), *TBD*

12:15: Lunch

2:00: Aris Anagnostopoulos (Sapienza University of Rome), *TBD*

2:25: Shahrzad Haddadan (Rutgers Business School), *Optimally Improving Cooperative Learning in a Social Setting*

2:50: Lutz Oettershagen (University of Liverpool), *Mining Temporal Networks*

3:15: Cake Break

4:00: Gianmarco De Francisci Morales (CentAI), *Learning Agent-Based Models from Data*

4:45: Free time for collaboration

6:00: Dinner

8:00: Cheese platters

Tuesday 9/24

7:30-8:45: Breakfast

9:15: Luca Becchetti (Sapienza University of Rome), *Fully decentralized dynamics for community detection*

10:00: Will Rosenbaum (University of Liverpool), *Bias Reduction for Sum Estimation*

10:25: Coffee Break

11:00: Tony Wirth (University of Sydney), *Maximizing coverage, and related topics, in streams*

11:45: Stefan Neumann (Technische Universität Wien), *Sublinear-Time Opinion Estimation*

12:15: Lunch

2:00: Sergei Vassilvitskii (Google), *Controlling Tail Risk in Online Ski Rental*

2:25: Rasmus Pagh (University of Copenhagen), *Differentially Private Continual Counting*

2:50: *Open Problem Session: Bring your (computational) problems!*

3:15: Cake Break

4:00: Mahito Sugiyama (National Institute of Informatics), *Information Geometry for Statistical Knowledge Discovery: Patterns, Tensors, and Mode Interactions*

4:45: Free time for collaboration

6:00: Dinner

8:00: Cheese platters

Wednesday 9/25

7:30-8:45: Breakfast

9:15: Pauli Miettinen (University of Eastern Finland), *Probabilistic methods to speed up (private) redescription mining*

10:00: Fabio Vandin (University of Padova), *Efficient Discovery of Significant Patterns with Few-Shot Resampling*

10:25: Coffee Break

11:00: Alessandro Epasto (Google), *Efficient Algorithms with Privacy*

11:45: Esther Galbrun (University of Eastern Finland), *Randomizing fossils to investigate patterns of competitive exclusion*

12:15: Lunch

2:00: Excursion to Trier with Dinner

6:00: Dinner (for those staying in Dagstuhl)

8:00: Cheese platters

Thursday 9/26

7:30-8:45: Breakfast

9:15: Mauro Sozio (Telecom Paris), *Fully-dynamic decision trees*

10:00: Silvio Lattanzi (Google), *Resiliency, consistency and randomness*

10:25: Coffee Break

11:00: Giulia Preti (CentAI), *Beyond the Configuration Model: Descriptive Null Models for (Hyper)graphs*

11:45: Fabian Brandt-Tumescheit (Humboldt University), *A Fully-dynamic Approximation Algorithm for Weighted b -Matchings in Graphs*

12:15: Lunch

1:55: Meet for group picture

2:00: Andrea Pietracaprina (University of Padua), *Fast and Accurate Fair k -Center Clustering in Doubling Metrics*

2:25: Nikolaj Tatti (University of Helsinki), *Finding Favourite Tuples on Data Streams with Provably Few Comparisons*

2:50: Ilie Sarpe (KTH Royal Institute of Technology), *Sampling-based algorithms for approximate subgraph counting*

3:15: Cake Break

4:00: Eli Upfal (Brown University), *Theory and Algorithms for Weak-Supervision and Zero-Shot Learning*

4:45: Free time for collaboration

6:00: Dinner

8:00: Cheese platters

Friday 9/27

7:30-8:45: Breakfast

9:15: Alessio Mazzetto (Brown University), *Learning with Drifting Input Distributions*

10:00: Aris Gionis (KTH Royal Institute of Technology), *Minimizing hitting time between disparate groups with shortcut edges*

10:25: Coffee Break

11:00: Larry Rudolph (Two Sigma Investments) *Memento: Why Artifact Naming Matters*

11:45: Conclusions and Goodbyes

12:15: Lunch