

Randomization in Parameterized Complexity

Monday Jan 23 2017

08.57–09.05 Seminar intro

09.05–10.00 **Tutorial.** *Michał Pilipczuk: Recursive understanding*

10.00–10.30 Coffee break

10.30–11.30 *Jesper Nederlof: Faster Space Efficient Algorithms for Subset Sum and Knapsack*

11.30–12.00 *Andreas Björklund: Directed Hamiltonicity parameterized by the largest independent set*

12.00 Lunch

15.30 Cake

16.30–17.55 *Open problems session*

18.00 Dinner

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Tuesday Jan 24 2017

09.00-10.00 **Tutorial.** *Meirav Zehavi: k -Path of Algorithms*

10.00-10.30 Coffee break

10.30-11.00 *Saket Saurabh: Exact Algorithms via Monotone Local Search*

11.00-11.30 *Lukasz Kowalik: Improving TSP tours using dynamic programming over tree decomposition*

11.30-12.00 *Stefan Szeider: Backdoors for Constraint Satisfaction*

12.15 Lunch

15.30 Cake

16.00-16.30 *Petteri Kaski: How proofs are prepared at Camelot*

16.30-17.00 *Tobias Friedrich: Average-Case Analysis of Parameterized Problems*

17.00-17.30 *Radu Curticapean: Recent insights into counting small patterns*

17.30-18.00 *Holger Dell: Finding Detours is Fixed-parameter Tractable*

18.00 Dinner

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Wednesday Jan 25 2017

09.00-10.00 **Tutorial.** *David P. Woodruff: Parameterized Algorithms for Matrix Factorization Problems*

10.00-10.30 Coffee break

10.30-11.00 *Ramanujan Sridharan: Lossy Kernelization I*

10.30-11.00 *Fahad Panolan: Lossy Kernelization II: Cycle Packing*

11.30-12.00 *Daniel Lokshtanov: Lossy Kernelization, III: Lower Bounds*

12.15 Lunch

15.30 Cake

18.00 Dinner

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Thursday Jan 26 2017

- 09.00-10.00 *Bingkai Lin: Gap Amplification using Bipartite Random Graphs*
- 10.00-10.30 Coffee break
- 10.30-11.15 *Amir Abboud: Hardness in P*
- 11.15-11.30 *Arturs Backurs: Towards Hardness of Approximation for Polynomial Time Problems*
- 11.30-12.00 *Karl Bringmann: A Near-Linear Pseudopolynomial Time Algorithm for Subset Sum*
- 12.15 Lunch
- 15.30 Cake
- 16.00-17.00 *Dániel Marx and Marcin Pilipczuk: Subexponential Parameterized Algorithms for Planar Graphs, Apex-Minor-Free Graphs and Graphs of Polynomial Growth via Low Treewidth Pattern Covering*
- 17.00-17.30 *Gregory Z. Gutin: Parameterized Traveling Salesman Problem: Beating the Average*
- 17.30-18.00 *Cornelius Brand: Fine-grained dichotomies for the Tutte plane and Boolean #CSP*
- 18.00 Dinner