Seminar 23111

Monday, March 13th, 2023

| 09:00–09:50 | The Organizers: Anna Gál, Meena Mahajan, Rahul Santhanam, Till Tantau Bidding Everyone Welcome and Building the Graph of Participants and Their Interests | |
|-------------|---|----------------------|
| 09:50–10:20 | Mika Göös Top-Down Lower Bounds for Depth-Four Circuits | Till Tantau Chair |
| 10:20-11:00 | Coffee Break | |
| 11:00–11:30 | Shuichi Hirahara Capturing one-way functions via NP-hardness of meta-complexity | |
| 11:30-12:00 | lgor Carboni Oliveira Unprovability of strong complexity lower bounds in bounded arithmetic | |
| 12:15 | Lunch | |
| 15:30 | Cake | |
| 16:00–16:40 | Olaf Beyersdorff Models of CDCL solving for quantified Boolean formulas | Anna Gál Chair |
| 16:45–17:15 | Ben Lee Volk Extractors for Algebraic Sources | |
| 17:30–17:50 | Participants Open Problems | |
| 18:00 | Dinner | |

Tuesday, March 14th, 2023

| 09:00–09:40 | Amnon Ta-Shma Constant degree bipartite graphs with almost optimal combinatorial expansion | Meena Chair |
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| 09:45–10:15 | Amit Chakrabarti How to color your adversary's graph (and connections with communication complexity) | |
| 10:15–10:45 | Coffee Break | |
| 10:45–11:15 | Michal Koucký Locally consistent decomposition of strings with applications to edit distance sketching | |
| 11:20–11:50 | Michael E. Saks Simple, fast, space-efficient and deterministic (but weak) approximation for Edit Distance and Dyck edit distance | |
| 11:55–12:05 | Manaswi Parashar Talk to Talk About | |
| 12:15 | Lunch | |
| 14:00–15:30 | Break-out Sessions | Till Chair |
| 15:30–16:00 | Quick Cake | |
| | Break-out Sessions | |
| 17:00–18:00 | Break-out Sessions Presenting Findings | |
| 18:00 | Dinner | |

Wednesday, March 15th, 2023

| 09:00–09:40 | Gil Cohen | Rahul Santhanam |
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| | Recent progress towards BPL vs. L | Chair |
| 09:45–10:15 | Alexander S. Kulikov | |
| 09.45-10.15 | Polynomial formulations as a barrier for reduction-based hardness proc | ofs |
| 10:15–10:45 | Coffee Break | |
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| 10:45–11:15 | Yuval Filmus | |
| | HITTING and complexity measures | |
| 11:20–11:50 | Jacobo Torán | |
| | Width in Cutting Planes and the Weisfeiler-Leman dimension. | |
| 11:50–12:00 | Sourav Chakraborty | |
| 10.05 | Talk to Talk About | |
| 12:05 | Group Photo | |
| 12:15 | Lunch | |
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| 13:30 | Hike (depending on weather) | |
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| 18:00 | Dinner | |
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Thursday, March 16th, 2023

| 09:00–09:30 | Swastik Kopparty The Elliptic Curve Fast Fourier Transform (ECFFT) | Michal Koucký Chair |
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| 09:35–10:05 | Johan Hastad On small depths Frege proofs for PHP | |
| 10:05–10:45 | Coffee Break | |
| 10:45–11:15 | Avishay Tal Fourier Growth of Query and Communication Models | |
| 11:20–11:50 | Sourav Chakraborty Testing correctness of samplers using property testing: from theory to practice and back again | |
| 11:55–12:05 | Manaswi Parashar Talk to Talk About | |
| 12:15 | Lunch | |
| 15:30 | Cake | |
| 16:00–16:30 | Susanna de Rezende Coloring is hard on average for polynomial calculus | Jacobo Torán Chair |
| 16:35–17:05 | Sophie Laplante Certificate Games | |
| 17:30–17:50 | Open Problems Participants | |
| 18:00 | Dinner | |
| 20:00 | Music and Wine and Cheese | |

Friday, March 17th, 2023

| 09:15–09:45 | Robert Robere Colourful TFNP and Propositional Proofs | Rahul Santhanam Chair |
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| 09:50–10:20 | Rahul Ilango The Complexity of Circuit Range Avoidance | |
| 10:15–11:00 | Coffee Break | |
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| 11:00-11:10 | Till Tantau | |
| | Talk to Talk About | |
| 11:15–11:35 | Rüdiger Reischuk | |
| 12:15 | Lunch – Do not forget to pay before you leave! | U |