

| Tuesday July 8 |                                                                                                                                                                |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | Aud 1 Track A<br>1250-304 (Per Kirkeby)                                                                                                                        | Aud 2 Track A<br>1252-204 (Eduard Biermann)                                                                                                                                 | Aud 3 Track A<br>1252-310 (Jeppe Vontilius)                                                                                                                                                           | Aud 4 Track B<br>1253-211 (Merete Barker)                                                                                                                                                           |
| 8:30 - 9:00    | Registration and coffee                                                                                                                                        |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
| 9:00 - 9:15    | Welcome                                                                                                                                                        |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
| 9:15- 10:15    | Invited Talk -Anupam Gupta<br>Title: Online Algorithm Design Beyond the Worst Case<br>Auditorium 1 - 1250-304 (Per Kirkeby)<br>Chair: Fabrizio Grandoni        |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
| 10:15 - 10:35  | Coffee break                                                                                                                                                   |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
| 10:35 - 12:15  | Session 1.A.1<br>Chair: Sebastian Forster<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                                   | Session 1.A.2<br>Chair: Danny Hermelin<br>Aud 2<br>1252-204 (Eduard Biermann)                                                                                               | Session 1.A.3<br>Chair: Christian Konrad<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                                                                       | Session 1.B: Formal Verification<br>and Logical Expressiveness<br>Chair: Valérie Berthé<br>Aud 4<br>1253-211 (Merete Barker)                                                                        |
|                | An Optimal 3-Fault-Tolerant<br>Connectivity Oracle:<br><br><i>E. Kosinas</i>                                                                                   | Tiling Random Regular Graphs<br>Efficiently:<br><br><i>S. Diskin, I. Hoshen, M. Zhukovskii</i>                                                                              | Robust Contraction Decomposition<br>for Minor-Free Graphs and its<br>Applications:<br><br><i>P. Misra, D. Marx, S. Saurabh, J. Xue, D. Neuen, S. BANDYAPADHYAY, D. Lokshtanov, W. Lochet, P. Tale</i> | Weighted GKAT: completeness and<br>complexity:<br><br><i>S. Van Koevring; W. Rózewski; A. Silva</i>                                                                                                 |
|                | Light Edge Fault Tolerant Graph<br>Spanners:<br><br><i>G. Bodwin, M. Dinitz, A. Koranteng, L. Wang</i>                                                         | Belief Propagation Guided<br>Decimation on Random k-XORSAT:<br><br><i>A. Chatterjee, A. Coja-Oghlan, M. Kang, L. Krieg, M. Rolvien, G. Sorkin</i>                           | Sampling with a Black Box: Faster<br>Parameterized Approximation<br>Algorithms for Vertex Deletion<br>Problems:<br><br><i>B. Esmer, A. Kulik</i>                                                      | Verification of linear dynamical<br>systems via o-minimality of the<br>real numbers:<br><br><i>T. Karimov</i>                                                                                       |
|                | Faster Construction of a Planar<br>Distance Oracle with $\tilde{O}(1)$ Query<br>Time:<br><br><i>I. Boneh, S. Golan, S. Mozes, D. Prigan, O. Weimann</i>        | Random Reed-Solomon Codes<br>Achieve the Half-Singleton Bound<br>for Insertions and Deletions over<br>Linear-Sized Alphabets:<br><br><i>R. Con, Z. Guo, R. Li, Z. Zhang</i> | Faster & Deterministic FPT<br>Algorithm for Worst-Case Tensor<br>Decomposition:<br><br><i>V. Bhargava, D. Shringi</i>                                                                                 | Positive and monotone fragments<br>of FO and LTL:<br><br><i>S. Iosti; D. Kuperberg; Q. Moreau</i>                                                                                                   |
|                | Near-Optimal Algorithm for<br>Directed Expander<br>Decompositions:<br><br><i>A. Sulser, M. Gutenberg</i>                                                       | Low-temperature Sampling on<br>Sparse Random Graphs:<br><br><i>A. Galanis, L. Goldberg, P. Smolarova</i>                                                                    | Parameterized Algorithms for<br>Matching Integer Programs with<br>Additional Rows and Columns:<br><br><i>A. Lassota, K. Ligthart</i>                                                                  | Forbidden induced subgraphs for<br>bounded shrub-depth and the<br>expressive power of MSO:<br><br><i>N. Mählmann</i>                                                                                |
|                | Near-Optimal Directed Low-<br>Diameter Decompositions:<br><br><i>K. Bringmann, N. Fischer, B. Haeupler, R. Latypov</i>                                         | Fourier Analysis of Iterative<br>Algorithms:<br><br><i>C. Jones, L. Pesenti</i>                                                                                             | Subgraph Counting in<br>Subquadratic Time for Bounded<br>Degeneracy Graphs:<br><br><i>D. Paul-Pena, C. Seshadhri</i>                                                                                  |                                                                                                                                                                                                     |
| 12:15 - 14:15  | Lunch<br><i>Math's Canteen (Department of Mathematics, bldg. 1530)</i>                                                                                         |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
| 14:15 - 15:55  | Session 2.A.1<br>Chair: Simon Apers<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                                         | Session 2.A.2<br>Chair: Lars Rohwedder<br>Aud 2<br>1252-204 (Eduard Biermann)                                                                                               | Session 2.A.3<br>Chair: Lorenzo Orecchia<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                                                                       | Session 2.B: Complexity and<br>Decision Problems<br>Chair: Matthew Hague<br>Aud 4<br>1253-211 (Merete Barker)                                                                                       |
|                | Drainability and Fillability of<br>Polyominoes in Diverse Models of<br>Global Control:<br><br><i>S. Fekete, P. Kramer, J. Reinhardt, C. Rieck, C. Scheffer</i> | Dynamic Algorithms for<br>Submodular Matching:<br><br><i>M. Monemizadeh, K. Banihashem, S. Goudarzi, P. Jabbarzade, L. Biabani, M. Hajiaghayi</i>                           | Cut-Preserving Vertex Sparsifiers<br>for Planar and Quasi-bipartite<br>Graphs:<br><br><i>Y. Chen, Z. Tan</i>                                                                                          | Reachability in 3-VASS is<br>Elementary:<br><br><i>W. Czerwiński; I. Jecker; S. Lasota; Ł. Orlikowski</i>                                                                                           |
|                | Yet Another Simple Proof of the<br>PCRP Theorem:<br><br><i>N. Ohsaka</i>                                                                                       | Streaming Maximal Matching with<br>Bounded Deletions:<br><br><i>S. Khanna, C. Conrad</i>                                                                                    | Maximum Bipartite vs. Triangle-<br>Free Subgraph:<br><br><i>T. Nakajima, S. Zivny</i>                                                                                                                 | The ultimate signs of second-order<br>holonomic sequences:<br><br><i>F. Hagihara; A. Kawamura</i>                                                                                                   |
|                | Mim-Width is paraNP-complete:<br><br><i>B. Bergougnoux, É. Bonnet, J. Duron</i>                                                                                | Faster Semi-streaming Matchings<br>via Alternating Trees:<br><br><i>S. Mitrović, A. Mukherjee, P. Sankowski, W. Sheu</i>                                                    | Submodular Hypergraph<br>Partitioning: Metric Relaxations<br>and Fast Algorithms via an<br>Improved Cut-Matching Game:<br><br><i>A. Chen, L. Orecchia, E. Tani</i>                                    | Complexity of approximate<br>conflict-free, linearly-ordered, and<br>nonmonochromatic hypergraph<br>colourings:<br><br><i>T.-V. Nakajima; Z. Verwimp; M. Wrochna; S. Zivny</i>                      |
|                | Asymptotically Optimal<br>Inapproximability of Maxmin k-Cut<br>Reconfiguration:<br><br><i>S. Hirahara, N. Ohsaka</i>                                           | Near-optimal Hypergraph<br>Sparsification in Insertion-only and<br>Bounded-deletion Streams:<br><br><i>S. Khanna, A. Putterman, M. Sudan</i>                                | On Deleting Vertices to Reduce<br>Density in Graphs and<br>Supermodular Functions:<br><br><i>K. Chandrasekaran, C. Chekuri, S. Kulkarni</i>                                                           | The trichotomy of regular property<br>testing:<br><br><i>G. Bathie; N. Fijalkow; C. Mascle</i>                                                                                                      |
|                | New Bounds for the Ideal Proof<br>System in Positive Characteristic:<br><br><i>A. Behera, N. Limaye, V. Ramanathan, S. Srinivasan</i>                          | Deterministic Independent Sets in<br>the Semi-Streaming Model:<br><br><i>D. Ye</i>                                                                                          | One-Shot Learning for k-SAT:<br><br><i>A. Galanis, L. Goldberg, X. Zhang</i>                                                                                                                          |                                                                                                                                                                                                     |
| 15:55 - 16:15  | Coffee break                                                                                                                                                   |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |
| 16:15 - 17:35  | Session 3.A.1<br>Chair: Oren Weimann<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                                        | Session 3.A.2<br>Chair: Monaldo Mastroiilli<br>Aud 2<br>1252-204 (Eduard Biermann)                                                                                          | Session 3.A.3<br>Chair: Marek Elias<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                                                                            | Session 3.B: Computability and<br>Models of Computation<br>Chair: Akitoshi Kawamura<br>Aud 4<br>1253-211 (Merete Barker)                                                                            |
|                | Faster all-pairs optimal electric car<br>routing:<br><br><i>D. Dorfman, H. Kaplan, U. Zwick, M. Thorup, R. Tarjan</i>                                          | 3.415-Approximation for Coflow<br>Scheduling via Iterated Rounding:<br><br><i>L. Rohwedder, L. Schnaars</i>                                                                 | On the Complexity of Hazard-Free<br>Formulas:<br><br><i>L. Arazi, A. Shpilka</i>                                                                                                                      | Computability of languages of G-<br>shifts:<br><br><i>D. E. Amir; B. H. de Menibus</i>                                                                                                              |
|                | Near-Optimal Trace<br>Reconstruction for Mildly<br>Separated Strings:<br><br><i>A. Aamand, A. Liu, S. Narayanan</i>                                            | ETH-Tight FPT Algorithm for<br>Makespan Minimization on<br>Uniform Machines:<br><br><i>L. Rohwedder</i>                                                                     | P-time algorithms for typical #EO<br>problems:<br><br><i>B. Meng, J. Wang, M. Xia</i>                                                                                                                 | Taming infinity one chunk at a<br>time: concisely represented<br>strategies in one-counter MDPs:<br><br><i>M. Ajdarów; J. C. A. Main; P. Novotný; M. Randour</i>                                    |
|                | Faster diameter computation in<br>graphs of bounded Euler genus:<br><br><i>K. Kluk, M. Pilipczuk, M. Pilipczuk, G. Stamoulis</i>                               | Weakly Approximating Knapsack in<br>Subquadratic Time:<br><br><i>L. Chen, J. Lian, Y. Mao, G. Zhang</i>                                                                     | A Near-Optimal Polynomial<br>Distance Lemma Over Boolean<br>Slices:<br><br><i>P. Amireddy, A. Behera, S. Srinivasan, M. Sudan</i>                                                                     | Online and feasible presentability:<br>from trees to modal Boolean<br>algebras:<br><br><i>N. Bazhenov; D. Kalociński; M. Wrocławski</i>                                                             |
|                | An Upper Bound on the Weisfeiler-<br>Leman Dimension.:<br><br><i>T. Schneider, P. Schweitzer</i>                                                               | Decay of correlation for edge<br>colorings when $q \geq 3\Delta$ :<br><br><i>Z. Chen, Y. Wang, C. Zhang, Z. Zhang</i>                                                       | A Pseudorandom Generator for<br>Functions of Low-Degree<br>Polynomial Threshold Functions:<br><br><i>P. Yao, M. Zhao</i>                                                                              | Separability properties of<br>monadically dependent graph<br>classes:<br><br><i>É. Bonnet; S. Braunfeld; I. Eleftheriadis; C. Geniet; N. Mählmann; M. Pilipczuk; W. Przybyszewski; S. Toruńczyk</i> |
| 18:15 - 21:00  | Reception<br><i>The Old Town (Den Gamle By)</i>                                                                                                                |                                                                                                                                                                             |                                                                                                                                                                                                       |                                                                                                                                                                                                     |

| Wednesday July 9 |                                                                                                                                                                                                                     |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
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|                  | Aud 1 Track A<br>1250-304 (Per Kirkeby)                                                                                                                                                                             | Aud 2 Track A<br>1252-204 (Eduard Biermann)                                                                                                                                            | Aud 3 Track A<br>1252-310 (Jeppe Vontilius)                                                                                                                  | Aud 4 Track B<br>1253-211 (Merete Barker)                                                                                        |
| 8:30 - 9:00      | Registration and coffee                                                                                                                                                                                             |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 9:00- 10:00      | <b>Invited Talk – Dana Ron-Goldreich</b><br>Title: Let’s try and be more tolerant: On tolerant property testing and distance approximation<br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Thore Husfeldt |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 10:00 - 10:20    | Coffee break                                                                                                                                                                                                        |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 10:20 - 12:00    | <b>Best Paper Session Track A</b><br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Fabrizio Grandoni                                                                                                       |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
|                  | <b>Track A Best Paper:</b><br><br>An efficient algorithm to compute the minimum free energy of interacting nucleic acid strands:<br><br><i>A. Shalaby, D. Woods</i>                                                 |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
|                  | <b>Track A Best Student Paper:</b><br><br>The Converse of the Real Orthogonal Holant Theorem:<br><br><i>B. Young</i>                                                                                                |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
|                  | <b>Best Paper Session Track B</b><br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Joël Ouaknine                                                                                                           |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
|                  | <b>Track B Best Paper:</b><br><br>Tree algebras and bisimulation-invariant MSO on finite graphs:<br><br><i>T. Colcombet, A. Doumane, D. Kuperberg</i>                                                               |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
|                  | <b>Track B Best Student Paper:</b><br><br>First-order intuitionistic linear logic and hypergraph languages:<br><br><i>T. Pshenitsyn</i>                                                                             |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 12:00 - 14:00    | <b>Lunch</b><br><i>Math’s Canteen (Department of Mathematics, bldg. 1530)</i>                                                                                                                                       |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 14:00 - 15:40    | <b>Session 4.A.1</b><br>Chair: Sebastian Forster<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                                                                                 | <b>Session 4.A.2</b><br>Chair: Tuukka Korhonen<br>Aud 2<br>1252-204 (Eduard Biermann)                                                                                                  | <b>Session 4.A.3</b><br>Chair: Lorenzo Orecchia<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                       | <b>Session 4.B: Automata and Infinite Structures</b><br>Chair: Antonín Kučera<br>Aud 4<br>1253-211 (Merete Barker)               |
|                  | Decremental (1+ $\epsilon$ )-Approximate Maximum Eigenvector: Dynamic Power Method:<br><br><i>D. Adil, T. Saranurak</i>                                                                                             | ARRIVAL: Recursive Framework & l1-Contraction:<br><br><i>S. Haslebacher</i>                                                                                                            | Satisfiability of commutative vs. non-commutative CSPs:<br><br><i>A. Bulatov, S. Zivny</i>                                                                   | The memory of $\omega$ -regular and BC( $\Sigma^2$ ) objectives:<br><br><i>A. Casares; P. Ohlmann</i>                            |
|                  | Faster Dynamic ( $\Delta+1$ )-Coloring Against Adaptive Adversaries:<br><br><i>M. Flin, M. Halldorsson</i>                                                                                                          | Pushing the frontiers of subexponential FPT time for Feedback Vertex Set:<br><br><i>G. Berthe, M. Bougeret, D. Goncalves, J. Raymond</i>                                               | The Role of Regularity in (Hyper-)Clique Detection and Implications for Optimizing Boolean CSPs:<br><br><i>N. Fischer, M. Künnemann, M. Redzic, J. Stieß</i> | A collapse of the parity index hierarchy of tree automata, based on Cantor-Bendixson ranks:<br><br><i>K. Lehtinen; N. Lhote</i>  |
|                  | Minimizing Recourse in an Adaptive Balls and Bins Game:<br><br><i>A. Fine, H. Kaplan, U. Stemmer</i>                                                                                                                | Computing Distances on Graph Associahedra is Fixed-parameter Tractable:<br><br><i>L. Cunha, I. Sau, U. Souza, M. Valencia-Pabon</i>                                                    | Algorithms for the Diverse-k-SAT problem: the geometry of satisfying assignments:<br><br><i>P. Austrin, I. Bercea, M. Goswami, N. Limaye, A. Srinivasan</i>  | Nondeterministic tree-walking automata are not closed under complementation:<br><br><i>O. Martynova; A. Okhotin</i>              |
|                  | Minimum+1 Steiner Cut and Dual Edge Sensitivity Oracle: Bridging Gap between Global and (s,t)-cut:<br><br><i>K. Bhanja</i>                                                                                          | Treewidth Parameterized by Feedback Vertex Number:<br><br><i>H. Molter, M. Zehavi, A. Zivan</i>                                                                                        | One-way Communication Complexity of Minimum Vertex Cover in General Graphs:<br><br><i>M. Derakhshan, A. Ghasemi, R. Rajaraman</i>                            | Saturation problems for families of automata:<br><br><i>L. Bohn; Y. Li; C. Löding; S. Schewe</i>                                 |
|                  | Incremental Approximate Maximum Flow via Residual Graph Sparsification:<br><br><i>G. Goranci, M. Henzinger, H. Räcke, A. Sricharan</i>                                                                              | All-Subsets Important Separators with Applications to Sample Sets, Balanced Separators and Vertex Sparsifiers in Directed Graphs :<br><br><i>A. Anand, E. Lee, J. Li, T. Saranurak</i> | Multiparty Communication Complexity of Collision-Finding and Cutting Planes Proofs of Concise Pigeonhole Principles:<br><br><i>P. Beame, M. Whitmeyer</i>    | Using games and universal trees to characterise the nondeterministic index of tree languages:<br><br><i>O. Idir; K. Lehtinen</i> |
| 15:40 - 16:10    | Coffee break                                                                                                                                                                                                        |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 16:10 - 16:50    | <b>EATCS Award Talk</b><br>Rajeev Alur<br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Giuseppe F. Italiano                                                                                               |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 16:50 - 17:00    | <b>Distinguished Dissertation Award</b><br>Joakim Blikstad<br>Christoph Grunau<br>Tuukka Korhonen<br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Giuseppe F. Italiano                                    |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |
| 17:00 - 19:00    | <b>EATCS General Assembly</b><br><br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i>                                                                                                                                   |                                                                                                                                                                                        |                                                                                                                                                              |                                                                                                                                  |

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|  | Chair: Giuseppe F. Italiano |
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| Thursday July 10 |                                                                                                                                                                                                                      |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
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|                  | Aud 1 Track A<br>1250-304 (Per Kirkeby)                                                                                                                                                                              | Aud 2 Track A<br>1252-204 (Eduard Biermann)                                                                                                                    | Aud 3 Track A<br>1252-310 (Jeppe Vontilius)                                                                                                               | Aud 4 Track B<br>1253-211 (Merete Barker)                                                                                                       |
| 8:30 - 9:00      | Registration and coffee                                                                                                                                                                                              |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
| 9:00- 10:00      | Invited Talk – Hongseok Yang<br>Title: Introduction to Razborov's Flag Algebras: Logic-Based Computational Methods in Extremal Combinatorics<br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Joël Ouaknine |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
| 10:00 - 10:20    | Coffee break                                                                                                                                                                                                         |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
| 10:20 - 12:00    | <b>Session 5.A.1</b><br>Chair: Lars Rohwedder<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                                                                                     | <b>Session 5.A.2</b><br>Chair: Oded Lachish<br>Aud 2<br>1252-204 (Eduard Biermann)                                                                             | <b>Session 5.A.3</b><br>Chair: Artur Czumaj<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                        | <b>Session 5.B: Formal Languages and Approximation</b><br>Chair: Ruiwen Dong<br>Aud 4<br>1253-211 (Merete Barker)                               |
|                  | Graph Exploration: The Impact of a Distance Constraint:<br><br><i>Y. Dieudonné, A. Labourel, S. Devismes</i>                                                                                                         | k-Leaf Powers Cannot be Characterized by a Finite Set of Forbidden Induced Subgraphs for $k \geq 5$ :<br><br><i>M. la Tour, M. Lafond, N. Ndiaye, A. Vetta</i> |                                                                                                                                                           | Density of rational languages under shift-invariant measures:<br><br><i>H. Goulet-Ouellet; V. Berthé; D. Perrin</i>                             |
|                  | Deterministic Even-Cycle Detection in Broadcast CONGEST:<br><br><i>P. Fraigniaud, M. Luce, F. Magniez, I. Todinca</i>                                                                                                | Algorithmic aspects of semistability of quiver representations:<br><br><i>Y. Iwamasa, T. Oki, T. Soma</i>                                                      | Identifying Approximate Minimizers under Stochastic Uncertainty:<br><br><i>H. Al-Thani, V. Nagarajan</i>                                                  | A tropical approach to the compositional piecewise complexity of words and compressed words:<br><br><i>P. Schnoebelen; J. Veron; I. Vialard</i> |
|                  | Shared Randomness Helps with Local Distributed Problems:<br><br><i>A. Balliu, M. Ghaffari, F. Kuhn, D. Olivetti, A. Modanese, M. Rabie, J. Suomela, J. Uitto</i>                                                     | Boosting SNARKs and Rate-1 Barrier in Arguments of Knowledge:<br><br><i>J. Cheng, R. Goyal</i>                                                                 | A New Impossibility Result for Online Bipartite Matching Problems:<br><br><i>F. Chierichetti, M. Giacchini, A. Panconesi, A. Vattani</i>                  | Reducing stochastic games to semidefinite programming:<br><br><i>M. Boudirsky; G. Loho; M. Skomra</i>                                           |
|                  | Simultaneously Approximating All Norms for Massively Parallel Correlation Clustering:<br><br><i>N. Cao, S. Li, J. Ye</i>                                                                                             | Guessing Efficiently for Constrained Subspace Approximation:<br><br><i>A. Bhaskara, S. Mahabadi, M. Pittu, A. Vakilian, D. Woodruff</i>                        | Online Disjoint Spanning Trees and Polymatroid Bases:<br><br><i>K. Chandrasekaran, C. Chekuri, W. Zhu</i>                                                 | Approximate problems for finite transducers:<br><br><i>E. Filiot; I. Jecker; K. Madhani; S. Sunny</i>                                           |
|                  | Fully Scalable MPC Algorithms for Euclidean k-Center:<br><br><i>A. Czumaj, G. Gao, M. Ghaffari, S. Jiang</i>                                                                                                         | Towards the Proximity Conjecture on Group-Labeled Matroids:<br><br><i>D. Garamvölgyi, R. Mizutani, T. Oki, T. Schwarcz, Y. Yamaguchi</i>                       | Deterministic complexity analysis of Hermitian eigenproblems:<br><br><i>A. Sobczyk</i>                                                                    |                                                                                                                                                 |
| 12:00 - 14:00    | Lunch<br><i>Math’s Canteen (Department of Mathematics, bldg. 1530)</i>                                                                                                                                               |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
| 14:00 - 15:40    | <b>Session 6.A.1</b><br>Chair: Artur Czumaj<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                                                                                       | <b>Session 6.A.2</b><br>Chair: Marel Elias<br>Aud 2<br>1252-204 (Eduard Biermann)                                                                              | <b>Session 6.A.3</b><br>Chair: Christian Konrad<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                    | <b>Session 6.B: Constraint Satisfaction and Logic</b><br>Chair: Andrei Bulatov<br>Aud 4<br>1253-211 (Merete Barker)                             |
|                  | <b>Merged talk:</b><br>On Incremental Approximate Shortest Paths in Directed Graphs:<br><br><i>A. Górkiewicz, A. Karczmarz</i>                                                                                       | Nearly Optimal Circuit Size for Sparse Quantum State Preparation :<br><br><i>L. Li, J. Luo</i>                                                                 | Testing C_k-freeness in Bounded Admissibility Graphs:<br><br><i>O. Lachish, F. Reidl, C. Awofeso, P. Greaves, A. Levi</i>                                 | Holant dichotomy on domain size 3: a geometric perspective:<br><br><i>J.-Y. Cai; J. S. Ihm</i>                                                  |
|                  | Incremental Approximate Single-Source Shortest Paths with Predictions:<br><br><i>S. McCauley, B. Moseley, A. Niaparast, H. Niaparast, S. Singh</i>                                                                   | Quantum Speedup for Sampling Random Spanning Trees:<br><br><i>C. Liu, M. Gao, Z. Ji, S. Apers</i>                                                              | On the Instance Optimality of Detecting Collisions and Subgraphs:<br><br><i>O. Ben-Eliezer, T. Grossman, M. Naor</i>                                      | Restricted CSPs and F-free digraph algorithmics:<br><br><i>S. Guzmán Pro; B. Martin</i>                                                         |
|                  | A Simple Dynamic Spanner via APSP:<br><br><i>G. Zöcklein, S. Meierhans, R. Kyng</i>                                                                                                                                  | On the quantum time complexity of divide and conquer:<br><br><i>J. Allcock, J. Bao, A. Belovs, T. Lee, M. Santha</i>                                           | Approximating Dasgupta Cost in Sublinear Time from a Few Random Seeds:<br><br><i>M. Kapralov, A. Kumar, S. Lattanzi, A. Mousavifar, W. Wrzos-Kaminska</i> | Containment for guarded monotone strict NP:<br><br><i>A. Barsukov; M. Pinsker; J. Rydval</i>                                                    |
|                  | Fully Dynamic Algorithms for Transitive Reduction:<br><br><i>G. Goranci, A. Karczmarz, A. Mohammadabadi, N. Parotsidis</i>                                                                                           | NPA Hierarchy for Quantum Isomorphism and Homomorphism Indistinguishability:<br><br><i>P. Kar, D. Roberson, T. Seppelt, P. Zeman</i>                           | A 0.51-Approximation of Maximum Matching in Sublinear n <sup>1.5</sup> Time:<br><br><i>S. Mahabadi, M. Roghani, J. Tarnawski</i>                          | Limitations of affine integer relaxations for solving constraint satisfaction problems:<br><br><i>M. Lichter; B. Pago</i>                       |
|                  | Undirected 3-Fault Replacement Path in Nearly Cubic Time:<br><br><i>S. Chi, R. Duan, B. Wang, T. Xie</i>                                                                                                             | Deciding Local Unitary Equivalence of Graph States in Quasi-Polynomial Time:<br><br><i>N. Claudet, S. Perdrix</i>                                              | Relative-error testing of conjunctions and decision lists:<br><br><i>X. Chen, W. Pires, T. Pitassi, R. Servedio</i>                                       |                                                                                                                                                 |
| 15:40 - 16:10    | Coffee break                                                                                                                                                                                                         |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
| 16:10 - 17:20    | <b>Presburger Award</b><br>Sepehr Assadi<br>Tomasz Kociumaka<br><br><i>Auditorium 1 - 1250-304 (Per Kirkeby)</i><br>Chair: Thore Husfeldt                                                                            |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |
| 17:35 - 23:00    | <b>Dinner + Transport</b><br><i>Hermans, Tivoli Friheden</i>                                                                                                                                                         |                                                                                                                                                                |                                                                                                                                                           |                                                                                                                                                 |

| Friday July 11 |                                                                                                                                                    |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                | Aud 1 Track A<br>1250-304 (Per Kirkeby)                                                                                                            | Aud 2 Track A<br>1252-204 (Eduard Biermann)                                                                                       | Aud 3 Track A<br>1252-310 (Jeppe Vontilius)                                                                                                                   | Aud 4 Track B<br>1253-211 (Merete Barker)                                                                                                      |
| 8:30 - 9:00    | Registration and coffee                                                                                                                            |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
| 9:00- 10:00    | Invited Talk – Mary Wootters<br>Title: List-Recovery and (Non)-Applications<br>Auditorium 1 - 1250-304 (Per Kirkeby)<br>Chair: Fabrizio Grandoni   |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
| 10:00 - 10:20  | Coffee break                                                                                                                                       |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
| 10:20 - 12:00  | Session 7.A.1<br>Chair: Fabrizio Grandoni<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                       | Session 7.A.2<br>Chair: Stéphane Devismes<br>Aud 2<br>1252-204 (Eduard Biermann)                                                  | Session 7.A.3<br>Chair: Monaldo Mastrolilli<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                            | Session 7.B: Algebraic and Structural Models<br>Chair: Dmitry Chistikov<br>Aud 4<br>1253-211 (Merete Barker)                                   |
|                | Optimal Distance Labeling for Permutation Graphs:<br><br><i>P. Gawrychowski, W. Janczewski</i>                                                     | Even Faster Algorithm for the Chamfer Distance:<br><br><i>P. Indyk, Y. Feng</i>                                                   | Improved Approximation Algorithms for Three-Dimensional Bin Packing:<br><br><i>D. Kar, A. Khan, M. Rau</i>                                                    | Submonoid membership in n-dimensional lamplighter groups and S-unit equations:<br><br><i>Ruiwen Dong</i>                                       |
|                | Counting Permutation Patterns with Multidimensional Trees:<br><br><i>N. Lavee, G. Beniamini</i>                                                    | How to compute the volume in low dimension?:<br><br><i>A. Cornelissen, S. Apers, S. Gribling</i>                                  | New Results on a General Class of Minimum Norm Optimization Problems:<br><br><i>K. Chen, J. Li, Y. Rabani, Y. Zhang</i>                                       | Membership and conjugacy in inverse semigroups:<br><br><i>L. Fleischer; F. Stober; A. Thumm; A. Weiß</i>                                       |
|                | Optimal Static Fully Indexable Dictionaries:<br><br><i>J. Liang, R. Zhou</i>                                                                       | Faster Fréchet Distance under Transformations:<br><br><i>K. Buchin, M. Buchin, Z. Huang, A. Nusser, S. Wong</i>                   | Branch-and-Bound Algorithms as Polynomial-time Approximation Schemes:<br><br><i>K. Encz, M. Mastrolilli, E. Vercesi</i>                                       | Nonuniform deterministic finite automata over finite algebraic structures:<br><br><i>J. Krzaczkowski; P. Kawałek; P. M. Idziak</i>             |
|                | Repetition Aware Text Indexing for Matching Patterns with Wildcards:<br><br><i>S. Thankachan, D. Gibney, J. Huffstutler, M. Parthasarathi</i>      | Light Spanners with Small Hop-Diameter:<br><br><i>S. Bhore, L. Milenković</i>                                                     | Approximation Algorithms for Optimal Hopsets:<br><br><i>M. Dinitz, Y. Nazari, A. Koranteng</i>                                                                | Algebraic language theory with effects:<br><br><i>F. Lenke; S. Milius; H. Urbat; T. Wissmann</i>                                               |
|                | Ultra-Resilient Superimposed Codes: Near-Optimal Construction and Applications:<br><br><i>G. De Marco, D. Kowalski</i>                             | Faster, Deterministic and Space Efficient Subtrajectory Clustering:<br><br><i>I. van der Hoog, T. van der Horst, T. Ophelders</i> | Improved Approximation Algorithms for Capacitated Network Design and Flexible Graph Connectivity:<br><br><i>I. Bansal, J. Cheriyan, S. Khanna, M. Simmons</i> |                                                                                                                                                |
| 12:00 - 14:00  | Lunch<br><i>Math’s Canteen (Department of Mathematics, bldg. 1530)</i>                                                                             |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
| 14:00 - 15:40  | Session 8.A.1<br>Chair: Gianluca De Marco<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                       | Session 8.A.2<br>Chair: Kazuo Iwama<br>Aud 2<br>1252-204 (Eduard Biermann)                                                        | Session 8.A.3<br>Chair: Jukka Suomela<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                                  | Session 8.B: Probabilistic and Quantum Reasoning<br>Chair: Wojciech Czerwiński<br>Aud 4<br>1253-211 (Merete Barker)                            |
|                | q-Partitioning Valuations: Exploring the Space BetweenSubadditive and Fractionally Subadditive Valuations:<br><br><i>K. Bangachev, S. Weinberg</i> | Induced Disjoint Paths Without an Induced Minor:<br><br><i>P. Aboulker, É. Bonnet, T. Picavet, N. Trotignon</i>                   | A Theory of Spectral CSP Sparsification:<br><br><i>S. Khanna, A. Putterman, M. Sudan</i>                                                                      | The satisfiability and validity problems for Probabilistic Computational Tree Logic are highly undecidable:<br><br><i>M. Chodil; A. Kucera</i> |
|                | Unbalanced Random Matching Markets with Partial Preferences:<br><br><i>S. Singh, A. Potukuchi</i>                                                  | Optimal Inapproximability of Promise Equations over Finite Groups:<br><br><i>S. Butti, A. Larrauri, S. Zivny</i>                  | Tight Bounds for Heavy-Hitters and Moment Estimation in the Sliding Window Model:<br><br><i>S. Feng, W. Swartworth, D. Woodruff</i>                           | The value problem for multiple-environment MDPs with parity objective:<br><br><i>K. Chatterjee; L. Doyen; J.-F. Raskin; O. Sankur</i>          |
|                | Randomized Binary and Tree Search under Pressure:<br><br><i>A. Caracci, C. Dürr, J. Verschae</i>                                                   | On the complexity of Client-Waiter and Waiter-Client games:<br><br><i>V. Gledel, N. Oijid, S. Tavenas, S. Thomasse</i>            | Fitting Tree Metrics and Ultrametrics in Data Streams:<br><br><i>A. Carmel, D. Das, E. Kipouridis, E. Pipis</i>                                               | Bayesian inference in quantum programs:<br><br><i>C. Gehnen; D. Unruh; J.-P. Katoen</i>                                                        |
|                | IID Prophet Inequality with Random Horizon: Going Beyond Increasing Hazard Rates:<br><br><i>G. Giambartolomei, F. Mallmann-Trenn, R. Saona</i>     | Worst-Case and Average-Case Hardness of Hypercycle and Database Problems:<br><br><i>C. Fu, A. Lincoln, R. Reyes</i>               | Improved Streaming Edge Coloring:<br><br><i>S. Chechik, H. Chen, T. Zhang</i>                                                                                 | Probabilistic and causal satisfiability: constraining the model:<br><br><i>M. Bläser; J. Dörfler; M. Liskiewicz; B. van der Zander</i>         |
|                | Merged talk:<br>Stable Hypergraph Matching in Unimodular Hypergraphs:<br><br><i>G. Csaji, P. Biró, I. Schlotter</i>                                | On the Degree Automatability of Sum-of-Squares Proofs:<br><br><i>A. Bortolotti, M. Mastrolilli, L. Vargas</i>                     | Coresets for Robust Clustering via Black-box Reductions to Vanilla Case:<br><br><i>S. Jiang, J. Lou</i>                                                       |                                                                                                                                                |
|                | Scarf’s Algorithm on Arborescence Hypergraphs:<br><br><i>K. Chandrasekaran, Y. Faenza, C. He, J. Sethuraman</i>                                    |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
| 15:40 - 16:10  | Coffee break                                                                                                                                       |                                                                                                                                   |                                                                                                                                                               |                                                                                                                                                |
| 16:10 - 17:30  | Session 9.A.1<br>Chair: Jukka Suomela<br>Aud 1<br>1250-304 (Per Kirkeby)                                                                           | Session 9.A.2<br>Chair: Kazuo Iwama<br>Aud 2<br>1252-204 (Eduard Biermann)                                                        | Session 9.A.3<br>Chair: Fabrizio Grandoni<br>Aud 3<br>1252-310 (Jeppe Vontilius)                                                                              | Session 9.A.4<br>Chair: Gianluca De Marco<br>Aud 4<br>1253-211 (Merete Barker)                                                                 |
|                | Parameterised Holant Problems:<br><br><i>P. Aivasiliotis, A. Göbel, M. Roth, J. Schmitt</i>                                                        | Robust-Sorting and Applications to Ulam-Median:<br><br><i>R. Jaiswal, A. Kumar, J. Yadav</i>                                      | On the Complexity of Telephone Broadcasting: From Cacti to Bounded Pathwidth Graphs:<br><br><i>A. Aminian, S. Kamali, S. Seyed-Javadi, Sumedha</i>            | The Long Arm of Nashian Allocation in Online p-Mean Welfare Maximization:<br><br><i>Z. Huang, C. Lee, X. Shu, Z. Wang</i>                      |
|                | (Almost-)Optimal FPT Algorithm and Kernel for {sc T-Cycle} on Planar Graphs:<br><br><i>H. Gahlawat, A. Rathod, M. Zehavi</i>                       | An Optimal Error-Correcting Reduction for Matrix Multiplication:<br><br><i>S. Hirahara, N. Shimizu</i>                            | Optimal Oblivious Subspace Embeddings with Near-optimal Sparsity:<br><br><i>S. Chenakkod, M. Derezhinski, X. Dong</i>                                         | Universal Online Contention Resolution with Preselected Order:<br><br><i>J. Zhao</i>                                                           |
|                | Revisiting Directed Disjoint Paths on tournaments (and relatives):<br><br><i>G. de Castro Mendes Gomes, R. Lopes, I. Sau</i>                       | Acceleration Meets Inverse Maintenance: Faster ℓ <sub>∞</sub> -Regression:<br><br><i>D. Adil, S. Jiang, R. Kyng</i>               | Deterministic k-Median Clustering in Near-Optimal Time:<br><br><i>M. Costa, E. Farokhnejad</i>                                                                | A Nearly Optimal Deterministic Algorithm for Online Transportation Problem:<br><br><i>T. Harada, T. Itoh</i>                                   |
|                | Cost Preserving Dependent Rounding for Allocation Problems:<br><br><i>L. Rohwedder, A. Rouhani, L. Wennmann</i>                                    |                                                                                                                                   | Minimum Cost Nowhere-Zero Flows and Cut-Balanced Orientations:<br><br><i>K. Chandrasekaran, S. Liu, R. Ravi</i>                                               | New and Improved Bounds for Markov Paging:<br><br><i>C. Pabbaraju, A. Vakilian</i>                                                             |