

**Queries**

- 9:00 – 9:30 Complexity of Data Tree Patterns over XML Documents  
*Claire David*
- 9:30 – 10:00 Optimizing Conjunctive Queries over Trees using Schema Information  
*Henrik Björklund, Wim Martens and Thomas Schwentick*
- 10:00 – 10:30 Smoothed Analysis of Binary Search Trees and Quicksort under Additive Noise  
*Bodo Manthey and Till Tantau*

10:30 – 11:00 **Coffee Break**

**Cryptography**

- 11:00 – 11:30 Sincere-Strategy Preference-Based Approval Voting Broadly Resists Control  
*Gábor Erdélyi, Markus Nowak and Jörg Rothe*
- 11:30 – 12:00 Step-out Ring Signatures  
*Marek Klonowski, Łukasz Krzywiecki, Mirosław Kutylowski and Anna Lauks*

12:00 – 12:10 **Cigarette Break**

Invited Lecture by **Piotr Sankowski**

- 12:10 – 13:10 Algebraic Graph Algorithms  
*Piotr Sankowski*

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**13:10 – 15:30 free time 13:10 – 15:30 free time 13:10 – 15:30**

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**Coloring**

- 15:30 – 16:00 A Note on  $k$ -colourability of  $P_5$ -free Graphs  
*Chinh T. Hoàng, Marcin Kamiński, Vadim Lozin, Joe Sawada and Xiao Shu*
- 16:00 – 16:30 Colouring Random Empire Trees  
*Andrew R. McGrae and Michele Zito*

16:30 – 17:00 **Coffee Break**

**Languages I**

- 17:00 – 17:30 The Height of Factorization Forests  
*Manfred Kufleitner*
- 17:30 – 18:00 Succinctness of Regular Expressions with Interleaving, Intersection and Counting  
*Wouter Gelade*

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**----- 18:10 ----- welcome party ----- 18:10 -----**

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**Logic I**

- 9:00 – 9:30 A Complete Axiomatic System for a Process-Based Spatial Logic  
*Radu Mardare and Alberto Policriti*
- 9:30 – 10:00 Complexity and Asymptotic Density of Boolean Functions over Implication  
*Hervé Fournier, Danièle Gardy, Antoine Genitrini and Bernhard Gittenberger*
- 10:00 – 10:30 Monadic Second Order Logic on Graphs with Local Cardinality Constraints  
*Stefan Szeider*

10:30 – 11:00 **Coffee Break**

**Models**

- 11:00 – 11:30 Directed Percolation Arising in Stochastic Cellular Automata Analysis  
*Damien Regnault*
- 11:30 – 12:00 Computational Complexity of Perfect-Phylogeny-Related Haplotyping Problems  
*Michael Elberfeld and Till Tantau*

12:00 – 12:10 **Cigarette Break**

Invited Lecture by **Jean-Éric Pin**

- 12:10 – 13:10 A Robust Class of Regular Languages  
*Antonio Cano Gómez and Jean-Éric Pin*

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**13:10 – 15:30 free time 13:10 – 15:30 free time 13:10 – 15:30**

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**Games I**

- 15:30 – 16:00 When Ignorance Helps: Graphical Multicast Cost Sharing Games  
*Vittorio Bilò, Angelo Fanelli, Michele Flammini and Luca Moscardelli*
- 16:00 – 16:30 Voronoi Games on Cycle Graphs  
*Marios Mavronicolas, Burkhard Monien, Vicky G. Papadopoulou and Florian Schoppmann*

16:30 – 17:00 **Coffee Break**

**Automata and Machines I**

- 17:00 – 17:30 Reversal-Bounded Counter Machines Revisited  
*Alain Finkel and Arnaud Sangnier*
- 17:30 – 18:00 On the Decidability of Bounded Valuedness for Transducers  
*Jacques Sakarovitch and Rodrigo de Souza*

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**18:30 Torunian gingerbreads in Copernicus House Group 1**

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**Medley**

- 9:00 – 9:30 On the Shortest Linear Straight-line Program for Computing Linear Forms  
*Joan Boyar, Philip Matthews and René Peralta*
- 9:30 – 10:00 Clustering with Partial Information  
*Hans L. Bodlaender, Michael R. Fellows, Pinar Heggernes, Federico Mancini, Charis Papadopoulos and Frances A. Rosamond*
- 10:00 – 10:30 A New Upper Bound for Max-2-SAT: A Graph-Theoretic Approach  
*Daniel Raible and Henning Fernau*

10:30 – 11:00

**Coffee Break****Logic II**

- 11:00 – 11:30 From Lambda Calculus to Universal Algebra and Back  
*Giulio Manzonetto and Antonino Salibra*
- 11:30 – 12:00 Short Proofs of Strong Normalization  
*Aleksander Wojdyga*

12:00 – 12:10

**Cigarette Break**Invited Lecture by **Ursula Goltz**

- 12:10 – 13:10 On Synchronous and Asynchronous Interaction in Distributed Systems  
*Rob van Glabbeek, Ursula Goltz and Jens-Wolfhard Schicke*

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**13:10 – 15:30 free time 13:10 – 15:30 free time 13:10 – 15:30**

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**Automata and Machines II**

- 15:30 – 16:00 Nilpotency and Limit Sets of Cellular Automata  
*Pierre Guillon and Gaétan Richard*
- 16:00 – 16:30 Periodicity and Immortality in Reversible Computing  
*Jarkko Kari and Nicolas Ollinger*

16:30 – 17:00

**Coffee Break****Games II**

- 17:00 – 17:30 Positional Strategies for Higher-Order Pushdown Parity Games  
*Arnaud Carayol and Michaela Slaats*
- 17:30 – 18:00 Question/Answer Games on Towers and Pyramids  
*Sarmad Abbasi and Numan Sheikh*

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**18:30****Torunian gingerbreads in Copernicus House****Group 2**

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**Approximation**

- 9:00 – 9:30 A  $6/5$ -Approximation Algorithm for the Maximum 3-Cover Problem  
*Ioannis Caragiannis and Gianpiero Monaco*
- 9:30 – 10:00 Approximating Independent Set and Coloring in Random Uniform Hypergraphs  
*Kai Plociennik*
- 10:00 – 10:30 A PTAS for the Sparsest Spanners Problem on Apex-Minor-Free Graphs  
*Feodor F. Dragan, Fedor V. Fomin and Petr A. Golovach*

10:30 – 11:00

**Coffee Break****Circuits**

- 11:00 – 11:30 Lower Bounds for Syntactically Multilinear Algebraic Branching Programs  
*Maurice J. Jansen*
- 11:30 – 12:00 Arithmetic Circuits, Syntactic Multilinearity, and the Limitations of Skew Formulae  
*Meena Mahajan and B. V. Raghavendra Rao*

12:00 – 12:10

**Cigarette Break**Invited Lecture by **Yuri Gurevich**

- 12:10 – 13:10 One Useful Logic That Defines Its Own Truth  
*Andreas Blass and Yuri Gurevich*

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**13:10 – 15:30 free time 13:10 – 15:30 free time 13:10 – 15:30**

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**Around NP I**

- 15:30 – 16:00 Computing Sharp 2-Factors in Claw-Free Graphs  
*Hajo Broersma and Daniël Paulusma*
- 16:00 – 16:30 Reoptimization of the Metric Deadline TSP  
*Hans-Joachim Böckenhauer and Dennis Komm*

16:30 – 17:00

**Coffee Break****Languages II**

- 17:00 – 17:30 Regional Languages and Tiling: a Unifying Approach to Picture Grammars  
*Alessandra Cherubini, Stefano Crespi Reghizzi and Matteo Pradella*
- 17:30 – 18:00 A Decision Problem for Ultimately Periodic Sets in Non-standard Numeration Systems  
*Emilie Charlier and Michel Rigo*

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**----- 19:00 ----- outdoor grill party ----- 19:00 -----**

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**Geometry**

- 9:00 – 9:30 Resolution Width and Cutting Plane Rank are Incomparable  
*Mark Rhodes*
- 9:30 – 10:00 Combinatorial Bounds and Algorithmic Aspects of Image Matching under Projective Transformations  
*Christian Hundt and Maciej Liškiewicz*
- 10:00 – 10:30 Flip Algorithm for Segment Triangulations  
*Mathieu Brévilliers, Nicolas Chevallier and Dominique Schmitt*

10:30 – 11:00 **Coffee Break**

**Complexity**

- 11:00 – 11:30 A Random Oracle Does Not Help Extract the Mutual Information  
*Andrei Muchnik and Andrei Romashchenko*
- 11:30 – 12:00 Arthur and Merlin as Oracles  
*Venkatesan T. Chakaravarthy and Sambuddha Roy*

12:00 – 12:10 **Cigarette Break**

Invited Lecture by **Rastislav Kráľovič**

- 12:10 – 13:10 Deterministic Models of Communication Faults  
*Rastislav Kráľovič and Richard Kráľovič*

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**13:10 – 15:30 free time 13:10 – 15:30 free time 13:10 – 15:30**

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**Languages III**

- 15:30 – 16:00 Shortest Synchronizing Strings for Huffman Codes  
*Marek Biskup*
- 16:00 – 16:30 On a Special Class of Primitive Words  
*Elena Czeizler, Lila Kari and Shinnosuke Seki*

16:30 – 17:00 **Coffee Break**

**Around NP II**

- 17:00 – 17:30 The Maximum Independent Set Problem in Planar Graphs  
*Vladimir E. Alekseev, Vadim Lozin, Dmitriy Malyshev and Martin Milanič*
- 17:30 – 18:00 Iterative Compression and Exact Algorithms  
*Fedor V. Fomin, Serge Gaspers, Dieter Kratsch, Mathieu Liedloff and Saket Saurabh*

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