

## Monday August 24th

9:00 - 10:00 **Albert Atserias: *Four subareas of the theory of constraints, and their links*** (invited talk)

10:00 - 10:30 coffee break

### 10:30 - 12:00 **Session A**

Ezra Resnick, Yoram Bachrach, Reshef Meir and Jeffrey Rosenschein: *The Cost of Stability in Network Flow Games*

Stavros Athanassopoulos, Ioannis Caragiannis, Christos Kaklamanis and Evi Papaioannou: *Energy-efficient communication in multi-interface wireless networks*

Vincenzo Auletta, Paolo Penna and Giuseppe Persiano: *Private capacities in mechanism design*

### 10:30 - 12:00 **Session B**

Diego Figueira and Luc Segoufin: *Future-looking logics on data words and trees*

Tony Tan: *On Pebble Automata for Data Languages with Decidable Emptiness Problem*

Lukasz Kaiser: *Synthesis for Structure Rewriting Systems*

12:00 - 15:00 lunch

### 15:00 - 17:00 **Session A**

Stavros Athanassopoulos, Ioannis Caragiannis, Christos Kaklamanis and Maria Kyropoulou: *An improved approximation bound for spanning star forest and color saving*

Johannes Köbler and Sebastian Kuhnert: *The  $k$ -tree isomorphism problem is complete for logspace*

Ivona Bezakova and William A. Rummel: *Sampling and Counting Edge Covers in 3-Regular Graphs*

Kyriaki Ioannidou, George Mertzios and Stavros Nikolopoulos: *The Longest Path Problem is Polynomial on Interval Graphs*

### 15:00 - 17:00 **Session B**

Manfred Kufleitner and Pascal Weil: *On FO2 quantifier alternation over words*

Wouter Gelade, Marc Gyssens and Wim Martens: *Regular expressions with Counting: Weak versus Strong Determinism*

Arturo Carpi and Flavio D'Alessandro: *The synchronization problem for locally strongly transitive automata*

Pawel Gawrychowski and Artur Jez: *Hyper-minimising and  $k$ -hyper-minimising the automaton in  $O(|\delta| \log n)$ .*

## Tuesday August 25th

**9:30 - 10:30 Peter Widmayer** (invited talk)

10:30 - 11:00 coffee break

11:00 - 12:30 **Session A**

Anuj Dawar and Yuguo He: *Parameterized Complexity Classes under Logical Reductions*

Yi Cao, Joseph Culberson and Lorna Stewart: *DP-complete Problems Derived from Extremal NP-complete Properties*

Sagarmoy Dutta and Piyush P Kurur: *Representing groups on graphs*

11:00 - 12:30 **Session B**

Ahmet Kara, Volker Weber, Martin Lange and Thomas Schwentick: *On the Hybrid Extension of CTL and CTL+*

Arne Meier, Martin Mundhenk, Thomas Schneider, Michael Thomas, Volker Weber and Felix Weiss: *The Complexity of Satisfiability for Fragments of Hybrid Logic --- Part I*

Stanislav Zivny, David A. Cohen and Peter G. Jeavons: *The Expressive Power of Binary Submodular Functions*

12:30 - 15:00 lunch

**15:00 - 16:00 Didier Caucal: Synchronization of regular automata** (invited talk)

16:00 - 16:30 coffee break

16:30 - 18:00 **Session A**

Daniel Kirsten: *An Algebraic Characterization of Semirings for which the Support of a Recognizable Series is Always Recognizable*

Tomi Kärki, Anne Lacroix and Michel Rigo: *On the recognizability of self-generating sets*

Francisco Claude and Gonzalo Navarro: *Indexing Straight-Line Programs*

16:30 - 18:00: **Session B**

Bakhadyr Khoussainov, Jiamou Liu and Imran Khaliq: *A Dynamic Algorithm for Reachability Games Played on Trees*

Sven Schewe: *From Parity and Payoff Games to Linear Programming*

Marco Faella: *Admissible Strategies in Infinite Games over Graphs*

## Wednesday August 26th

9:30 - 10:30 S. Muthu Muthukrishnan: *Stochastic Data Streams* (invited talk)

10:30 - 11:00 coffee break

11:00 - 12:30 **Session A**

Mathieu Chapelle, Frédéric Mazoit and Ioan Todinca:  
*Constructing Brambles*

Petr Golovach and Pinar Heggernes: *Choosability of  $P_5$ -free graphs*

Alessandro Bianco, Marco Faella, Fabio Mogavero and Aniello Murano: *Balanced Paths in Colored Graphs*

11:00 - 12:30 **Session B**

Giulio Manzonetto: *A general class of models of  $H^*$*

Marco Gaboardi, Luca Roversi and Luca Vercelli: *Multiplicative Exponential Linear Logic can be levelled*

Delia Kesner and Fabien Renaud: *The prismoid of resources*

12:30 - 15:00 lunch

## Thursday August 27th

**9:30 - 10:30 Pavlos Spirakis** (invited talk)

10:30 - 11:00 coffee break

11:00 - 12:30 **Session A**

Periklis Papakonstantinou: *On the Structure of Optimal Greedy Computation (for Job Scheduling)*

Kai Plociennik: *A Probabilistic PTAS for Shortest Common Superstring*

Feodor Dragan and Yang Xiang: *How to use spanning trees to navigate in graphs*

11:00 - 12:30 **Session B**

Rupert Hözl, Thorsten Kräling and Wolfgang Merkle: *Time-bounded Kolmogorov complexity and Solovay functions*

Xizhong Zheng and Robert Rettinger: *Points on Computable Curves of Computable Lengths*

Tadao Takaoka: *Partial Solution and Entropy*

12:30 - 15:00 lunch

**15:00 - 16:00 Javier Esparza: Stochastic process creation** (invited talk)

16:00 - 16:30 coffee break

16:30 - 18:00 **Session A**

Gaétan Richard: *(Un)decidability of injectivity and surjectivity in one-dimensional sand automaton*

Jarkko Kari, Pascal Vanier and Thomas Zeume: *Bounds on non-surjective cellular automata*

Violetta Lonati and Matteo Pradella: *Snake-Deterministic Tiling Systems*

16:30 - 18:00 **Session B**

Irénée Briquel and Pascal Koiran: *A Dichotomy Theorem for Polynomial Evaluation*

Martin Roetteler: *Quantum algorithms for hidden shift problems: quadratics and functions of large Gowers norm*

Kohtaro Tadaki: *Partial Randomness and Dimension of Recursively Enumerable Reals*

## Friday August 28th

**9:30 - 10:30 Krishnendu Chatterjee, Thomas A. Henzinger, and Florian Horn:**  
*Stochastic Games with Finitary Objectives* (invited talk)

10:30 - 11:00 coffee break

11:00 - 12:30 **Session A**

Sotiris Nikolettseas, Christoforos Raptopoulos and Paul Spirakis: *Colouring Non-Sparse Random Intersection Graphs*

Adrian Kosowski and Alfredo Navarra: *Graph Decomposition for Improving Memoryless Periodic Exploration*

Michael Fellows, Jiong Guo, Hannes Moser and Rolf Niedermeier:  
*A Complexity Dichotomy for Finding Disjoint Solutions of Vertex Deletion Problems*

11:00 - 12:30 **Session B**

Bernd Borchert, Pierre McKenzie and Klaus Reinhardt: *Few Product Gates but Many Zeros*

Kei Uchizawa, Eiji Takimoto and Takao Nishizeki: *Size and Energy of Threshold Circuits Computing Mod Functions*

Vikraman Arvind and Pushkar Joglekar: *Arithmetic Circuits, Monomial Algebras and Finite Automata*

12:30 - 15:00 lunch

15:00 - 16:30 **Session A**

Julien Degorre, Marc Kaplan, Sophie Laplante and Jérémie Roland: *The communication complexity of non-signaling distributions*

Nadja Betzler and Britta Dorn: *Towards a Dichotomy of Finding Possible Winners in Elections Based on Scoring Rules*

Paolo D'Arco, Alfredo De Santis, Anna Lisa Ferrara and Barbara Masucci: *Security and Tradeoffs of the Akl-Taylor Scheme and its Variants*

15:00 - 16:30 **Session B**

Mark Braverman, Stephen Cook, Pierre McKenzie, Rahul Santhanam and Dustin Wehr: *Branching Programs for Tree Evaluation*

Alexander Kartzow: *FO Model Checking on Nested Pushdown Trees*

P. Madhusudan and Mahesh Viswanathan: *Query Automata for Nested Words*

**Social events:**

- welcome party (Monday evening)
- leisure time (Wednesday afternoon)
- conference dinner (Friday evening)