



08.50 - 09.00

Opening and Welcome

09.00 - 10.00

Invited Talk: K. Mehlhorn

10.00 - 10.30

Coffee break

10.30 - 12.30

Session A1 - Randomness in computation

- A. Coja-Oghlan: A better algorithm for random k-SAT
- R. Elsässer, T. Sauerwald: Tight Bounds for the Cover Time of Multiple Random Walks
- A. Nies: Superhighness and strong jump traceability
- M. Hoyrup, C. Rojas: Applications of Effective Probability Theory to Martin-Loef Randomness

10.30 - 12.30

Session B1- Logic and Formal Languages

- A. Blumensath, M. Otto, M. Weyer: Boundedness of monadic second-order formulae over finite words
- J. Michaliszyn: Decidability of the Guarded Fragment with the Transitive Closure
- T. Place, L. Segoufin: A decidable characterization of LT on trees
- N. Kobayashi, L. Ong: Complexity of Model Checking Recursion Schemes for Fragments of the Modal Mu-Calculus

12.30 - 14.00

Lunch break

14.00 - 16.00

Session A2 - Matchings & Clusterings

- T. Kavitha, J. Mestre, M. Nasre: Popular Mixed Matchings
- N. Chen, N. Immerlica, A. Karlin, M. Mahdian, A. Rudra: Approximating Matches Made in Heaven
- E. J. Mc Dermid: A 3/2-approximation algorithm for general stable marriage
- N. Ailon, E. Liberty: Correlation Clustering Revisited: The "True" Cost of Error Minimization Problems

14.00 - 16.00

Session B2 - Automata Theory, Algebraic Methods

- T. Colcombet, K. Zdanowski: A Tight Lower Bound for Determinization of Buchi automata
- M. Beaudry, F. Lemieux: Faithful Loops for Aperiodic E-ordered Monoids
- J.E. Pin, M. J. Branco: Equations defining the polynomial closure of a lattice of regular languages
- T. Colcombet: The theory of stabilization monoids and regular cost functions

16.00 - 16.30

Coffee break

16.30 - 18.30

Session A3 - Scheduling

- T. Lam, L. Lee, H. F. Ting, I. To, P. W.H. Wong: Sleep with Guilt and Work Faster to Minimize Flow plus Energy
- N. Bansal, H. Chan, K. Pruhs, D. Rogozhnikov-Katz: Improved Bounds for Speed Scaling in Devices Obeying the Cube-Root Rule
- M. Mastrolilli, O. Svensson: Improved Bounds for Flow Shop Scheduling
- K. Jansen: An EPTAS for scheduling jobs on uniform processors: using an MILP relaxation with a constant number of integral variables

16.30 - 18.30

Session B3 - Rewriting and Types

- J.P. Jouannaud, V. van Oostrom: Diagrammatic Completion
- U. Dal Lago, S. Martini: On Constructor Rewrite Systems and the Lambda-Calculus
- L. Acciai, M. Boreale: Deciding safety properties in infinite-state pi-calculus via behavioural types

18.30 - 19.30

Welcome Reception



09.00 - 10.00

Invited Talk: T. Henzinger

10.00 - 10.30

Coffee break

10.30 - 12.30

Session A4 - Data Structures & Algorithms for Large Data Sets

- P. Bille, M. Thorup: Faster Regular Expression Matching
- A. Andoni, P. Indyk, K. Onak, R. Rubinfeld: External Sampling
- D. Golovin. B-Treaps: A Uniquely Represented Alternative to B-Trees
- A. Farzan, R. Raman, S. Rao Satti: Universal Representation of Succinct Trees

10.30 - 12.30

Session C1 - Foundations of distributed computing

- I. Chatzigiannakis, O. Michail, P. Spirakis: Mediated Population Protocols
- R. Guerraoui, E. Ruppert.: Names Trump Malice: Tiny Mobile Agents Can Tolerate Byzantine Failures
- R. Pugliese, F. Tiezzi, N. Yoshida: On observing dynamic prioritised actions in SOC
- R. De Nicola, D. Latella, M. Loreti, M. Massink: Rate-based Transition Systems for Stochastic Process Calculi

12.30 - 14.00

Lunch break

14.00 - 16.00

Session A5 - Graphs & Steiner Trees

- E.D. Demaine, M.T. Hajiaghayi, P. Klein: Node-weighted Steiner Tree and Group Steiner Tree in Planar Graphs
- J. Nederlof: Fast polynomial-space algorithms using Mobius inversion: Improving on Steiner Tree and related problems
- C. Chekuri, N. Korula: A Graph Reduction Step Preserving Element-Connectivity and Applications
- G. Agnarsson, M. Mörk Halldórsson, E. Losievskaja: SDP-based Algorithms for Maximum Independent Set Problems on Hypergraphs

14.00 - 16.00

Session B4 - Games and Bismulation

- M. Ummels, D. Wojtczak: The Complexity of Nash Equilibria in Simple Stochastic Multiplayer Games
- V. Gripon, O. Serre: Qualitative Concurrent Games with Imperfect Information
- P. Bouyer, V. Forejt: Reachability in Stochastic Timed Games
- P. Chaput, V. Danos, P. Panangaden, G. Plotkin: Approximating Markov Processes By Averaging

16.00 - 16.30

Coffee break

16.30 - 18.30

Session A6 - Communication & Communication Complexity

- B. Doerr, T. Friedrich, T. Sauerwald: Quasirandom Rumor Spreading: Expanders, Push vs. Pull, and Robustness
- J. Roland, M. Szegedy: Amortized communication complexity of distributions
- A. Klivans, P. Long, R. Servedio: Learning Halfspaces with Malicious Noise
- H. Kobayashi, F. Le Gall, H. Nishimura and M. Roetteler.: General Scheme for Perfect Quantum Network Coding with Free Classical Communication

16.30 - 18.30

Session C2 - Networks 1

- F. Chierichetti, S. Lattanzi, A. Panconesi: Rumor Spreading in Social Networks
- T. Friedrich, T. Sauerwald, D. Vilenchik: Smoothed Analysis of Balancing Networks
- S. Guha, K. Munagala: Multi-armed Bandits with Metric Switching Costs
- C. Cooper, D. Ilcinkas, R. Klasing, A. Kosowski: Derandomizing Random Walks in Undirected Graphs Using Locally Fair Exploration Strategies

18.30 - 19.30

EATCS General Assembly



09.00 - 10.00	Invited Talk: G. Gottlob
10.00 - 10.30	Coffee break
10.30 - 12.30	Session A7 - Data Structures <ul style="list-style-type: none">• Y. Arbitman, M. Naor, G. Segev: De-amortized Cuckoo Hashing: Provable Worst-Case Performance and Experimental Results• A. Farzan, I. Munro: Dynamic Succinct Ordered Trees• M. Dietzfelbinger, M. Rink: Applications of a splitting trick• V. Chakaravarthy, V. Pandit, S. Roy, Y. Sabharwal: Approximating Decision Trees with Multiway Branches
10.30 - 12.30	Session B5- Temporal Logics and Timed Automata <ul style="list-style-type: none">• L. Kuhtz, B. Finkbeiner: LTL Path Checking is Efficiently Parallelizable• C. Dax, F. Klaedtke, M. Lange: On Regular Temporal Logics with Past• P. Parys, I. Walukiewicz: Weak Alternating Timed Automata• C. Baier, N. Bertrand, P. Bouyer, T. Brihaye: When are Timed Automata Determinizable?
12.30 - 14.00	Lunch break
14.00 - 16.00	Session A8 - Sorting & Selection <ul style="list-style-type: none">• B. Gfeller, P. Sanders: Towards Optimal Range Medians• E.D. Demaine, G. Landau, O. Weimann: On Cartesian Trees and Range Minimum Queries• M. Ajtai, V. Feldman, A. Hassidim, J. Nelson: Sorting and Selection with Imprecise Comparisons• J. Ci ment, B. Vallee, P. Flajolet, J.A. Fill: The Number of Symbol Comparisons in Quicksort and Quickselect
14.00 - 16.00	Session B6 - Approaches to Verification <ul style="list-style-type: none">• J. Goubault-Larrecq, A. Finkel: Forward Analysis for WSTS, Part II: Complete WSTS• S. Boldo: Floats & Ropes: a case study for formal numerical program verification• M. Bodirsky, P. Jonsson, T. von Oertzen: Semilinear Program Feasibility• P.A. Mellies, N. Tabareau, C. Tasson: An explicit formula for the free exponential modality of linear logic
16.00 - 16.30	Coffee break
16.30 - 16.40	Special Event for C. Papadimitriou Intro Comments (Spirakis, Koutsoupias)
16.40 - 17.10	Richard Karp
17.10 - 17.40	Laszlo Lovasz
17.40 - 18.10	Coffee break
18.10 - 18.40	Noam Nisan
18.40 - 19.10	Tim Roughgarden
19.10 - 19.40	Mihalis Yannakakis
20.00 - on	<i>Banquet of ICALP</i>



09.00 - 10.00

Invited Talk: N. Nisan

10.00 - 10.30

Coffee break

10.30 - 12.30

Session A9 - Computational Complexity & Algebra

- H. Buhrman, L. Fortnow, R. Santhanam: Unconditional Lower Bounds against Advice
- K. Amano. Bounds on the Size of Small Depth Circuits for Approximating Majority
- I. Koutis, R. Williams: Limits and applications of group algebras for parameterized problems
- N. Kayal, T. Nezhmetdinov: Factoring groups efficiently

10.30 - 12.30

Session C3 - Networks 2

- C. Cooper, A. Frieze, T. Radzik: Multiple random walks and interacting particle systems
- Y. Azar, A. Madry, T. Moscibroda, D. Panigrahi, A. Srinivasan: Maximum Bipartite Flow in Networks with Adaptive Channel Width
- N. Korula, M. Pal: Algorithms for Secretary Problems on Graphs and Hypergraphs
- K. Jin Ahn, S. Guha: Graph Sparsification in the Semi-streaming Model

12.30 - 14.00

Lunch break

14.00 - 15.00

EATCS Award Ceremony

Opening Awards - Catuscia Palamidessi
Talk- Giorgio Ausiello

15.00 - 16.00

Session A10 - Boolean Functions

- P. Gopalan, R. O'Donnell, R. Servedio, A. Shpilka, K. Wimmer: Testing Fourier dimensionality and sparsity
- H. Morizumi: Limiting Negations in Formulas

Session A11 - Tiling & Self-Assembly

- H. Chandran, N. Gopalkrishnan, J. Reif. The Tile Complexity of Linear Assemblies
- B. Durand, A. Shen, A. Romashchenko. High Complexity Tilings with Sparse Errors

16.00 - 16.30

Coffee break

16.30 - 18.30

Session A12 - Data Streams

- S. Guha, Z. Huang: Revisiting the Direct Sum Theorem and Space Lower Bounds in Random Order Streams
- A. Chakrabarti, G. Cormode, A. McGregor: Annotations in Data Streams
- C. Arackaparambil, J. Brody, A. Chakrabarti: Functional Monitoring Without Monotonicity
- L. Becchetti, E. Koutsoupias: Competitive analysis of aggregate max in windowed streaming

16.30 - 18.30

Session AC1 - Wireless networks

- M. Halldorsson, R. Wattenhofer: Wireless Communication is in APX
- A. Fanghaenel, T. Kesselheim, B. Voeking: Improved Algorithms for Latency Minimization in Wireless Networks
- A. Clementi, F. Pasquale, R. Silvestri: MANETS: High mobility can make up for low transmission power
- D. Kowalski, A. Pelc: Leader Election in Ad Hoc Radio Networks: a Keen Ear Helps



09.00 - 10.00

Invited Talk: C. Papadimitriou

10.00 - 10.30

Coffee break

10.30 - 12.30

Session A13 - Graphs

- S. Arora, D. Steurer, A. Wigderson: Towards a study of low-complexity graphs
- Y. Ye, A. Borodin: Elimination Graphs
- O. Weimann, R. Yuster: Computing the Girth of a Planar Graph in $O(n \log n)$ Time
- S. Khuller, B. Saha: On Finding Dense Subgraphs

10.30 - 12.30

Session C4 - Games and markets

- D. Fotakis, A. Kaporis, P. Spirakis: Efficient Methods for Selfish Network Design
- C. Daskalakis, C. Papadimitriou: On a Network Generalization of the Minmax Theorem
- Li Zhang: Proportional response dynamics for the Fisher market
- D. Mosk-Aoyama, T. Roughgarden: Worst-Case Efficiency Analysis of Queueing Disciplines

12.30 - 14.00

Lunch break

14.00 - 16.00

Session A14 - Approximation & Online Algorithms

- Y. Emek, P. Fraigniaud, A. Korman, A. Rosen: Online Computation with Advice
- C. Koufogiannakis, N. Young: Greedy -Approximation Algorithm for Covering with Arbitrary Constraints and Submodular Cost
- E.D. Demaine, M.T. Hajiaghayi, K. Kawarabayashi. : Approximation Algorithms via Structural Results for Apex-Minor-Free Graphs
- M. Cygan, M. Pilipczuk: Exact and Approximate Bandwidth

14.00 - 16.00

Session AC2 - Data structures and security

- S. Chien, A. Sinclair. Strong and Pareto Price of Anarchy in Congestion Games
- C. Scheideler, S. Schmid. A Distributed and Oblivious Heap
- A. Anagnostopoulos, R. Kumar, M. Mahdian, E. Upfal: Sort Me If You Can: How to Sort Dynamic Data
- M. Ibrahim, A. Kiayias, M. Yung, H. Zhou: Secure Function Collection with Sublinear Storage

16.00 - 16.30

Coffee break

16.30 - 18.30

Session A15 - Fixed Parameter Algorithms & Complexity

- M. Fellows, F. Fomin, D. Lokshtanov, E. Losievskaja, F.A. Rosamond, S. Saurabh: Distortion is Fixed Parameter Tractable
- M. Dom, D. Lokshtanov, S. Saurabh: Incompressibility through Colors and IDs
- N. Alon, D. Lokshtanov, S. Saurabh: Fast FAST
- O. Amini, F. Fomin, S. Saurabh: Counting Subgraphs via Homomorphisms

16.30 - 18.30

Session A16 - Combinatorics, Learning & Automata

- E. Weinreb, E. Kushilevitz, J. Draisma: Partition Arguments in Multiparty Communication Complexity
- S. Holub, D. Nowotka: The Ehrenfeucht-Silberger Problem
- E. Boros, K. Makino: A Fast and Simple Parallel Algorithm for the Monotone Duality Problem
- N. Aubrun, M. B al: Decidability of conjugacy of tree shifts of finite type