

45th International Colloquium
on Automata, Languages, and Programming

ICALP programme

Prague, Czech Republic, July 9 – 13, 2018

Dear colleagues, welcome to Prague.

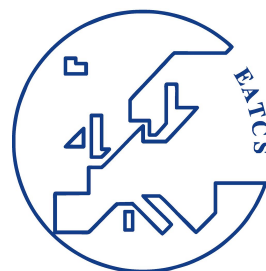
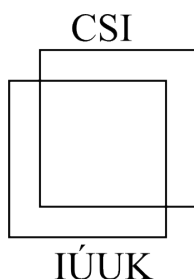
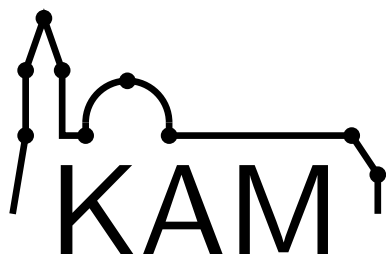
We are happy to host ICALP in Prague again after 19 years. We hope that you will enjoy the meeting, its scientific content, as well as the beauty and rich culture of our city and country.

In this booklet you will find details about the conference programme and a few notes on local matters.

We are grateful for generous support from AVAST and RSJ, which include both travel grants for young women researchers and students and direct support of the conference. We thank the School of Computer Science (Charles University, Faculty of Mathematics and Physics) and the Center of Excellence — Institute for Theoretical Computer Science (project P202/12/G061 of Czech Science Foundation) for their support.

Jiří Sgall, OC chair
Anna Kotěšovcová, CONFORG
Andreas Emil Feldmann
Jiří Fiala

Sponsors



Programme overview

Tuesday July 10

- 8:15 – 8:30 Opening *
- 8:30 – 9:30 Invited lecture * (chair *D. Marx*)
Richard Ryan Williams:
Lower Bounds by Algorithm Design: A Progress Report
- 10:00 – 12:00 Contributed talks of tracks A, B in parallel sessions
- 11:40 – 12:00 Best student paper of track B
- 13:30 – 16:00 Contributed talks of tracks A, B in parallel sessions
- 16:45 – 17:45 A special session in honor of Prof. Maurice Nivat * (chair *D. Sannella*)
Pierre-Louis Curien:
Un honnête homme (talk will be in English)
Giorgio Ausiello:
Maurice Nivat: Building a scientific community
- 18:00 – 20:00 Welcome party

Wednesday July 11

- 8:30 – 9:30 Invited lecture * (chair *D. Marx*)
Jaroslav Nešetřil:
Sparsity — an algorithmic perspective
- 10:00 – 12:00 Contributed talks of tracks A, B, C in parallel sessions
- 13:30 – 16:00 Contributed talks of tracks A, B in parallel sessions
- 16:30 – 19:00 EATCS general assembly *

Thursday July 12

- 8:30 – 9:30 Invited lecture * (chair *D. Sannella*)
Sam Staton:
Probability theory from a programming perspective
- 10:00 – 12:00 Contributed talks of tracks A, B, C in parallel sessions
- 13:30 – 15:15 Contributed talks of tracks A, B, C in parallel sessions
- 13:30 – 13:50 Best paper of track B — conference hall Earth
- 15:45 – 17:45 Awards session *
- 19:00 – 22:00 Conference dinner at Mánes **

Friday July 13

- 8:30 – 9:30 Invited lecture * (chair *C. Kaklamanis*)
Alexander A. Schwarzmann:
Consistent Distributed Memory Services: Resilience and Efficiency
- 10:00 – 12:00 Contributed talks of tracks A, C in parallel sessions
- 13:30 – 14:15 Contributed talks of tracks A, C in parallel sessions
- 14:45 – 15:55 Best papers of tracks A, C *

* Events located in the main conference hall Sun.

** See instructions below how to get to Mánes.

Lunch breaks are daily at 12:00 – 13:30.

Morning coffee breaks are daily at 9:30 – 10:00. Afternoon coffee breaks are at 16:00 – 16:45 on Tuesday, at 16:00 – 16:30 on Wednesday, at 15:15 – 15:45 on Thursday, and at 14:15 – 14:45 on Friday.

Tuesday morning contributed talks

Track A — Sun 1 chair <i>D. Marx</i> <i>J. Chuzhoy, D. H. K. Kim,</i> <i>R. Nimavat:</i> Improved Approximation for Node-Disjoint Paths in Grids with Sources on the Boundary	Track A — Sun 2 chair <i>J. Suomela</i> <i>T. Johnson, M. T. Goodrich,</i> <i>W. E. Devanny, J. J. B. Vidal,</i> <i>D. Eppstein:</i> Optimally Sorting Evolving Data	Track B — Earth chair <i>A. Muecholl</i> <i>M. Skrzypczak:</i> Unambiguous languages exhaust the index hierarchy	Track A — Jupiter chair <i>E. Ben-Sasson</i> <i>C. Röser, M. Schmidt:</i> Privacy preserving clustering with constraints	10:00 – 10:20
<i>A. Schmid, J. M. Schmidt:</i> Computing Tutte Paths	<i>M. Charikar, O. Geri, M. Kim,</i> <i>W. Kusznau:</i> On Estimating Edit Distance: Alignment, Dimension Reduction, and Embeddings	<i>M. Raskin:</i> A superpolynomial lower bound for the size of non-deterministic complement of an unambiguous automaton	<i>E. Boyle, A. Jain,</i> <i>M. Prabhakaran, C.-H. Yu:</i> The Bottleneck Complexity of Secure Multiparty Computation	10:25 – 10:45
<i>P. Sankowski:</i> NC Algorithms for Weighted Planar Perfect Matching and Related Problems	<i>P. Gawrychowski, P. Uznański:</i> Towards Unified Approximate Pattern Matching for Hamming and L_1 Distance	<i>G. Douéneau-Tabot:</i> On the complexity of infinite advice strings	<i>D. Micciancio, J. Sorrell:</i> Ring packing and amortized FHEW bootstrapping	10:50 – 11:10
<i>J. Fox, T. Roughgarden,</i> <i>C. Seshadhri, F. Wei, N. Wein:</i> Finding Cliques in Social Networks: A New Distribution-Free Model	<i>P. Gawrychowski, G. Landau,</i> <i>W.-K. Sung and O. Weimann:</i> A Faster Construction of Greedy Consensus Tree	<i>M. E. Descotte, D. Figueira,</i> <i>G. Puppis:</i> Resynchronizing Classes of Word Relations	<i>A. Romashchenko, M. Zimand:</i> An operational characterization of mutual information in algorithmic information theory	11:15 – 11:35
<i>A. Louís, R. Venkát:</i> Semi-random Graphs with Planted Sparse Vertex Cuts: Algorithms for Exact and Approximate Recovery	<i>B. Dudek, P. Gawrychowski:</i> Edit Distance between Unrooted Trees in Cubic Time	Best student paper of track B <i>S. Winter:</i> Uniformization Problems for Synchronizations of Automatic Relations on Words	<i>B. Berger, Z. Brakerski:</i> BA: Zero-Knowledge Protocols for Search Problems <i>N. Agarwal, S. Anand,</i> <i>M. Prabhakaran:</i> BA: On Secure m -Party Computation, Commuting Permutation Systems and Unassisted Non-Interactive MPC	11:40 – 12:00

BA means Brief Announcement

Tuesday afternoon contributed talks

Track A — Sun 1 chair <i>P. Sankowski</i> <i>M. Grohe, D. Neuen, P. Schweitzer, D. Wiebking:</i> An improved isomorphism test for bounded-tree-width graphs	Track A — Sun 2 chair <i>M. Jerrum</i> <i>J. Byrka, P. Skowron, K. Sornati:</i> Proportional Approval Voting, Harmonic k -median, and Negative Association	Track B — Earth chair <i>D. Sannella</i> <i>S. Staton, D. Stein, H. Yang, N. Ackerman, C. Freer, D. Roy:</i> The Beta-Bernoulli process and algebraic effects	Track A — Jupiter chair <i>E. Ben-Sasson</i> <i>B. Haueppler, A. Shahrasbi, M. Sudan:</i> Synchronization Strings: List Decoding for Insertions and Deletions	13:30 – 13:50
<i>H. Dell, M. Grohe, G. Rattan:</i> Lovász Meets Weisfeiler and Leman	<i>L. Elisa Celis, D. Straszak, N. K. Vishnoi:</i> Ranking with Fairness Constraints	<i>A. Aguirre, G. Barthe, J. Hsu, A. Silva:</i> Almost Sure Productivity	<i>B. Haueppler, A. Shahrasbi, E. Vitercik:</i> Synchronization Strings: Channel Simulations and Interactive Coding for Insertions and Deletions	13:55 – 14:15
<i>A. Kolla, I. Koutis, V. Madan, A. K. Sinop:</i> Spectrally Robust Graph Isomorphism	<i>J. Chen, B. Li, Y. Li, P. Lu:</i> BA: Bayesian Auctions with Efficient Queries <i>D. Graf, K. Labib, P. Uznański:</i> BA: Hamming distance completeness and sparse matrix multiplication	<i>L. Daviaud, R. Lazic, M. Jurdziński, F. Mazowiecki, G. Perez, J. Worrell:</i> When is Containment Decidable for Probabilistic Automata?	<i>S. Raskhodnikova, N. Varmva:</i> BA: Erasure-Resilience Versus Tolerance to Errors <i>J. Blochi, V. Gandikota, E. Grigorescu, S. Zhou:</i> BA: Relaxed Locally Correctable Codes in Computationally Bounded Channels	14:20 – 14:40
chair <i>P. Sankowski</i> <i>D. Chakrabarty, M. Negahbani:</i> Generalized Center Problems with Outliers	chair <i>R. Williams</i> <i>S. Liu:</i> Chain, Generalization of Covering Code, and Deterministic Algorithm for k -SAT	chair <i>P.-L. Curien</i> <i>S. Kiefer:</i> On Computing the Total Variation Distance of Hidden Markov Models	chair <i>P. Golovach</i> <i>E. Ben-Sasson, I. Bentou, Y. Horosh, M. Riabzev:</i> Fast Reed-Solomon Interactive Oracle Proofs of Proximity	14:50 – 15:10
<i>B. Gamlath, S. Huang, O. Svensson:</i> Semi-Supervised Algorithms for Approximately Optimal and Accurate Clustering	<i>A. Bogdanov:</i> Small bias requires large formulas	<i>S. Almagor, D. Chistikov, J. Ouaknine, J. Worrell:</i> O-Minimal Invariants for Linear Loops	<i>T. Gur, Y. Liu, R. Rothblum:</i> An Exponential Separation Between MA and AM Proofs of Proximity	15:15 – 15:35
<i>D. Chakrabarty, Ch. Swamy:</i> Interpolating between k -Median and k -Center: Approximation Algorithms for Ordered k -Median	<i>A. Abboud, K. Bringmann:</i> Tighter Connections Between Formula-SAT and Shaving Logs	<i>J. Gajarský, S. Kretutzer, J. Nešetřil, P. Ossona de Mendez, M. Pilipeczuk, S. Siebertz, S. Toruńczyk:</i> First-order interpretations of bounded expansion classes	<i>R. Gurjar, T. Thierauf, N. Vishnoi:</i> Isolating a Vertex via Lattices: Polytopes with Totally Unimodular Faces	15:40 – 16:00

Wednesday morning contributed talks

Track A — Sun 1 chair <i>D. Marx</i>	Track A — Sun 2 chair <i>S. Venkatasubramanian</i>	Track B — Earth chair <i>A. Kučera</i>	Track C — Jupiter chair <i>G. Mertzios</i>
<i>J. Chen, D. Hermelin, M. Sorge, H. Yedidsion:</i> How hard is it to satisfy (almost) all roommates?	<i>P. Bose, P. Carmi, V. Dujmović, S. Mehrabi, F. Montecchiani, P. Morin, L. Schultze:</i> Geodesic Obstacle Representation of Graphs	<i>G. Sénizergues, A. Weiss:</i> The isomorphism problem for finite extensions of free groups is in PSPACE	<i>T. Harks, M. Hoefer, A. Huber, M. Surek:</i> Efficient Black-Box Reductions for Separable Cost Sharing
<i>J. Jeong, E. J. Kim, S.-I. Oum:</i> Finding branch-decompositions of matroids, hypergraphs, and more	<i>P. Agarwal, H. Kaplan, M. Sharir:</i> Union of hypercubes and 3d Minkowski sums with random sizes	<i>I. Klimann:</i> To Infinity and Beyond	<i>V. Bilò, L. Moscardelli, C. Vinci:</i> Uniform Mixed Equilibria in Network Congestion Games with Link Failures
<i>E. Eiben, I. Karj:</i> How to navigate through obstacles?	<i>T. Biedl, A. Biniaz, R. Cummings, A. Lubiw, F. Manea, D. Nowotka, J. Shallit:</i> Rollercoasters and Caterpillars	<i>S.-K. Ko, R. Niskanen, I. Potapov:</i> On the Identity Problem for the Special Linear Group and the Heisenberg Group	<i>G. Christodoulou, M. Gairing, Y. Giannakopoulos, P. Spirakis:</i> The Price of Stability of Weighted Congestion Games
<i>F. Reidl, M. Wahlström:</i> Parameterized Algorithms for Zero Extension and Metric Labelling Problems	<i>T. M. Chan, Y. Nekrich, S. Rahul, K. Tsakalidis:</i> Orthogonal Point Location and Rectangle Stabbing Queries in 3-d	<i>A. Grandjean, B. Hellouin de Menibus, P. Vanier:</i> Aperiodic Points in \mathbb{Z}^2 -subshifts	<i>R. Colini-Baldeschi, M. Klimm, M. Scarsini:</i> Demand-Independent Optimal Tolls
<i>M. Xiao, H. Nagamochi:</i> BA: Bounded-Degree Bipartition is Fixed-Parameter Tractable <i>A. Babay, M. Dinitz, Z. Zhang:</i> BA: Characterizing Demand Graphs for (Fixed-Parameter) Shallow-Light Steiner Network	<i>N. Mamano, D. Eppstein, M. Goodrich, G. Barequet:</i> Stable-Matching Voronoi Diagrams: Combinatorial Complexity and Algorithms	<i>M. Hoyrup, D. Nava Saucedo, D. Stull:</i> Semicomputable geometry	<i>T. Kesselheim, B. Kodric:</i> Price of Anarchy for Mechanisms with Risk-Averse Agents

Wednesday afternoon contributed talks

Track A — Sun 1 chair <i>D. Marx</i>	Track A — Sun 2 chair <i>G. F. Italiano</i>	Track B — Earth chair <i>S. Lasota</i>	Track A — Jupiter chair <i>M. Jerrum</i>	13:30 – 13:50
<i>F. Fomin, P. Golovach,</i> <i>F. Panolan:</i> Parameterized Low-Rank Binary Matrix Approximation	<i>Z. Huang, Z. G. Tang, X. Wu, Y. Zhang:</i> Online Vertex-Weighted Bipartite Matching: Beating $1 - 1/e$ with Random Arrivals	<i>W. Czerwiński, P. Hofman, G. Zetszsche:</i> Unboundedness problems for languages of vector addition systems	<i>P. Gregor, S. Jäger, T. Mütze, J. Sawada, K. Wille:</i> Gray codes and symmetric chains	
<i>M. Lampis:</i> Finer Tight Bounds for Coloring on Clique-Width	<i>A. Gupta, R. Mehta, M. Molinaro:</i> Maximizing Profit with Convex Costs in the Random-order Model	<i>J. Leroux:</i> Polynomial Vector Addition Systems With States	<i>R. Armon-Friedman, H. Yuen:</i> Noise-tolerant testing of high entanglement of formation	13:55 – 14:15
<i>D. Lokshтанov, Ramamujan M. S., S. Saurabh, R. Sharma, M. Zehavi:</i> BA: Treewidth Modulator: Emergency Exit for DFVS	<i>B. Feldkord, M. Feldotto, A. Gupta, G. Guruganesh, A. Kumar, S. Riechers, D. Wajc:</i> Fully-Dynamic Bin Packing with Little Repacking	<i>S. Datta, A. Mukherjee, N. Vortmeier, T. Zeume:</i> Reachability and Distances under Multiple Changes	<i>Ch. Nirkhe, U. Vazirani, H. Yuen:</i> Approximate low-weight check codes and circuit lower bounds for noisy ground states	14:20 – 14:40
<i>S. Chaplick, M. De, A. Ravsky, J. Spoerhase:</i> BA: Approximation Schemes for Geometric Coverage Problems	chair <i>M. Halldórsson</i>	chair <i>J.-F. Raskin</i>	chair <i>B. Patt-Shamir</i>	
<i>M. Koutecký, A. Levin, S. Onn:</i> A Parameterized Strongly Polynomial Algorithm for Block Structured Integer Programs	<i>H. Fu, J. Li, P. Xu:</i> A PTAS for a Class of Stochastic Dynamic Programs	<i>J. Fearnley, M. Gairing, M. Mnich, R. Savani:</i> Reachability Switching Games	<i>A. Bar-On, I. Dinur, O. Dunkelmann, R. Hod, N. Keller, E. Ronen, A. Shamir:</i> Tight Bounds on Online Checkpointing Algorithms	14:50 – 15:10
<i>A. Bhaskara, S. Daruki, S. Venkatasubramanian:</i> Sublinear Algorithms for MAXCUT and Correlation Clustering	<i>T. Soma, Y. Yoshida:</i> A New Approximation Guarantee for Monotone Submodular Function Maximization via Discrete Convexity	<i>L. Clemente, S. Lasota:</i> Binary reachability of timed pushdown automata via quantifier elimination	<i>B. Gärtner, T. D. Hansen, P. Hubáček, K. Král, H. Mosaad, V. Slínová:</i> ARRIVAL: Next Stop in CLS	15:15 – 15:35
	<i>R. Ostrowsky, Y. Rabani, A. Yousefi:</i> Strictly Balancing Matrices in Polynomial Time Using Osborne's Iteration	<i>M. Fränzle, M. Shirmohammadi, M. Swaminathan, J. Worrell:</i> Costs and Rewards in Priced Timed Automata	<i>M. Carmosino, R. Impagliazzo, M. Sabini:</i> Fine-Grained Derandomization: From Problem-Centric Complexity to Resource-Centric Complexity	15:40 – 16:00

Thursday morning contributed talks

Track A — Sun 1 chair <i>S. Solomon</i>	Track A — Sun 2 chair <i>P. Pudlák</i>	Track B — Earth chair <i>M. Benedikt</i>	Track C — Jupiter chair <i>M. Gairing</i>	
<i>P. Gawrychowski, A. Karczmarz:</i> Improved Bounds for Shortest Paths in Dense Distance Graphs	<i>S. Chillara, N. Limaye, S. Srinivasan:</i> A Quadratic Size-Hierarchy Theorem for Small-Depth Multilinear Formulas	<i>A. Blumensath, F. Wolf:</i> Bisimulation Invariant Monadic-Second Order Logic in the Finite	<i>S. Dehghani, S. Ehsani, M. Hajiaghayi, V. Liaghat, S. Seddighin:</i> Greedy Algorithms for Online Survivable Network Design	10:00 – 10:20
<i>R. Duan, K. Lyu, Y. Xie:</i> Single-Source Bottleneck Path Algorithm Faster than Sorting for Sparse Graphs	<i>M. Forbes, S. Ghosh, N. Sazena:</i> Towards blackbox identity testing of log-variate circuits	<i>Ramanujan M. S., D. Lokshtanov, S. Saurabh, M. Zehavi:</i> Reducing CMSO Model Checking to Highly Connected Graphs	<i>B. Aronov, G. Bar-On, M. Katz:</i> Resolving SINR Queries in a Dynamic Setting	10:25 – 10:45
<i>T. Bläsius, C. Freiberger, T. Friedrich, M. Katzmann, F. Montenegro-Retana, M. Thieffry:</i> Efficient Shortest Paths in Scale-Free Networks with Underlying Hyperbolic Geometry	<i>L. Duraj, G. Gutowski, J. Kozik:</i> A note on two-colorability of nonuniform hypergraphs	<i>A. Atserias, S. Kreutzer, M. Noy:</i> On Zero-One and Convergence Laws for Graphs Embeddable on a Fixed Surface	<i>M. M. Halldórsson, G. Kortsarz, P. Mitra, T. Tozoyan:</i> Spanning Trees With Edge Conflicts and Wireless Connectivity	10:50 – 11:10
<i>R. Duan, H. Ren:</i> Approximating All-Pair Bounded-Leg Shortest Path and APSP-AF in Truly-Subcubic Time	<i>Z. Dvořák, K.-I. Kawarabayashi:</i> Additive non-approximability of chromatic number in proper minor-closed classes	<i>D. Kuske, N. Schweikardt:</i> Gaifman normal forms for counting extensions of first-order logic	<i>E. C. Akrida, G. Mertzios, P. Spirakis, V. Zamarayev:</i> Temporal Vertex Covers and Sliding Time Windows	11:15 – 11:35
<i>R. Duan, Y. Gu, L. Zhang:</i> Improved Time Bounds for All Pairs Non-decreasing Paths in General Digraphs	<i>A. Bhangale:</i> NP-hardness of coloring 2-colorable hypergraph with poly-logarithmically many colors		<i>M. Bateni, S. Behnezhad, M. Derakhshan, M. Hajiaghayi, V. Mirrokni:</i> BA: MapReduce Algorithms For Massive Trees <i>R. B. Basat, G. Einzäger, R. Friedman:</i> BA: Give Me Some Slack: Efficient Network Measurements	11:40 – 12:00

Thursday afternoon contributed talks and awards session

Track A — Sun 1 chair <i>S. Leonardi</i>	Track A — Sun 2 chair <i>M. Koucký</i>	Track B — Earth chair <i>S. Staton</i>	Track C — Jupiter chair <i>G. Christodoulou</i>	
<i>A. Conway, M. Farach-Colton, P. Shilane:</i> Optimal Hashing in External Memory	<i>S. Ganguly, D. Woodruff:</i> High Probability Frequency Moment Sketches	Best paper of track B <i>D. Nowotka, A. Saarela:</i> An optimal bound on the solution sets of one-variable word equations and its consequences	<i>F. Chierichetti, S. Haddadan:</i> On the Complexity of Sampling Vertices Uniformly from a Graph	13:30 – 13:50
<i>A. Aamand, M. B. T. Knudsen, M. Thorup:</i> Power of d Choices with Simple Tabulation	<i>A. Blum, V. Braverman, A. Kumar, H. Lang, L. Yang:</i> Approximate Convex Hull of Data Streams	<i>M. Ganardi, D. Huckle, M. Lohrey:</i> Randomized sliding window algorithms for regular languages	<i>S. A. Amir, S. Dudyicz, S. Schmid, S. Wiederrecht:</i> Congestion-Free Retrouting of Flows on DAGs	13:55 – 14:15
<i>D. Kane, S. Lovett, S. Moran:</i> Generalized comparison trees for point-location problems	<i>S. Golan, T. Kopelowitz, E. Porat:</i> Towards Optimal Approximate Streaming Pattern Matching by Matching Multiple Patterns in Multiple Streams	<i>T. Place, M. Zeitoun:</i> Separating without any ambiguity	<i>O. Kupferman, G. Vardi:</i> The Unfortunate-Flow Problem	14:20 – 14:40
<i>S. Walzer:</i> Load Thresholds for Cuckoo Hashing with Overlapping Blocks	<i>V. Braverman, E. Viola, D. P. Woodruff, L. Yang:</i> Revisiting Frequency Moment Estimation in Random Order Streams	<i>A. Amarilli, C. Paperman:</i> Constrained Topological Sorting		14:45 – 15:05
Awards session:				
15:45 – 16:15	EATCS Distinguished Dissertation Award: <i>Bas Ketsman, Ilya Razenshteyn, Aviad Rubinfeld</i>			
16:15 – 16:45	Presburger Award: <i>Alexander Mqdry</i>			
16:45 – 17:15	EATCS Award: <i>Noam Nisan</i>			
17:15 – 17:45	Gödel Prize: <i>Oded Regev</i>			

Friday morning contributed talks

<p>Track A — Sun 1 chair <i>M. Farach-Colton</i> <i>M. Charikar, S. Solomon:</i> Fully Dynamic Almost-Maximal Matching: Breaking the Polynomial Worst-Case Time Barrier <i>M. Arar, S. Chechik, S. Cohen, C. Stein, D. Wajc:</i> Dynamic Matching: Reducing Integral Algorithms to Approximately-Maximal Fractional Algorithms <i>M. Gupta, A. Singh:</i> Generic Single Edge Fault Tolerant Exact Distance Oracle</p>	<p>Track A — Sun 2 chair <i>Z. Dvořák</i> <i>Z. K. Koh, L. Sanità:</i> Stabilizing Weighted Graphs <i>L. S. Chandran, D. Issac, Y. K. Cheung:</i> Spanning Tree Congestion and Computation of Generalized Györi-Lovász Partition <i>A. Aamand, N. Hjuler, J. Holm, E. Rotenberg:</i> One-Way Trail Orientations <i>A. Adamaszek, M. Mnich, K. Paluch:</i> New Approximation Algorithms for (1,2)-TSP <i>D. Bilò:</i> New algorithms for Steiner tree reoptimization</p>	<p>Track A — Earth chair <i>A. Bogdanov</i> <i>U. Feige, B. Patt-Shamir, S. Vardi:</i> On the Probe Complexity of Local Computation Algorithms <i>H. Fichtenberger, R. Levi, Y. Vasudev, M. Wötzl:</i> A Sublinear Tester for Outerplanarity (and Other Forbidden Minors) With One-Sided Error <i>C. Lenzen, R. Levi:</i> A Centralized Local Algorithm for the Sparse Spanning Graph Problem <i>F. Eisenbrand, C. Humkenschröder, K.-M. Klein:</i> Faster Algorithms for Integer Programs with Block Structure <i>I. Diakonikolas, T. Gouleakis, J. Peebles, E. Price:</i> Sample-Optimal Identity Testing with High Probability</p>	<p>Track C — Jupiter chair <i>A. Schwartzmann</i> <i>S. Bouchard, Y. Dieudonne, A. Lamani:</i> Byzantine Gathering in Polynomial Time <i>M. Parter:</i> $(\Delta + 1)$ Coloring in the Congested Clique Model <i>F. Malmann-Trenn, C. Musco, C. Musco:</i> Eigenvector Computation and Community Detection in Asynchronous Gossip Models <i>O. Grossman, B. Haeupler, S. Mohanty:</i> Improved Algorithms for the Noisy Broadcast Model under Erasures <i>E. Ben-Sasson, E. Saig:</i> BA: Collaborative Discovery: A study of Guru-Follower dynamics <i>S. Das, D. Dereniowski, P. Uznański:</i> BA: Energy Constrained Depth First Search</p>	<p>10:00 – 10:20</p>	<p>10:25 – 10:45</p>	<p>10:50 – 11:10</p>	<p>11:15 – 11:35</p>	<p>11:40 – 12:00</p>
<p><i>V. Nakos, X. Shi, D. P. Woodruff, H. Zhang:</i> Improved Algorithms for Adaptive Compressed Sensing</p>								

Friday afternoon contributed talks

Track A — Sun 1 chair <i>F. Eisenbrand</i>	Track A — Sun 2 chair <i>P. Golovach</i>	Track A — Earth chair <i>M. Koucký</i>	Track C — Jupiter chair <i>M. Mosteiro</i>	13:30 – 13:50
<i>H. Guo, M. Jerrum:</i> Perfect Simulation of the Hard Disks Model by Partial Rejection Sampling	<i>S.-W. Cheng, Y. Mao:</i> Restricted Max-Min Fair Allocation	<i>K. Hayashi:</i> A Polynomial Time Algorithm to Compute Geodesics in CAT(0) Cubical Complexes	<i>M. Ando, A. Lyssyanskaya, E. Uppfal:</i> Practical and Provably Secure Onion Routing	13:55 – 14:15
<i>P. Gawrychowski, L. Markin, O. Weimann:</i> A Faster FPTAS for #Knapsack	<i>A. Gupta, A. Kumar, J. Li:</i> Non-Preemptive Flow-Time Minimization via Rejections	<i>M. Backens:</i> A complete dichotomy for complex-valued Holant ^c	<i>S. Patel, G. Persiano, K. Yeo:</i> CacheShuffle: A Family of Oblivious Shuffles	14:45 – 15:05
chair <i>C. Kaklamanis</i> and <i>D. Marx</i>				
Best paper of track C				
<i>D. Kowalski, M. A. Mosteiro:</i> Polynomial Counting in Anonymous Dynamic Networks with Applications to Anonymous Dynamic Algebraic Computations				
Best student paper of track A				
<i>S. Garg:</i> Quasi-PTAS for Scheduling with Precedences using LP Hierarchies				
Best paper of track A				
<i>H. Guo, M. Jerrum:</i> A polynomial-time approximation algorithm for all-terminal network reliability				

Prof. Maurice Nivat

December 21, 1937 — September 21, 2017

Maurice Nivat was a French computer scientist. His research spanned the areas of formal languages, programming language semantics, and discrete geometry. He was a Professor of Theoretical Computer Science at the University Paris VII "Denis Diderot" until he retired in 2002. He remained as Professor Emeritus until his death in 2017.



Maurice Nivat was extremely influential in theoretical computer science in Europe. In 1972 he was one of the founders and first President of the European Association for Theoretical Computer Science, EATCS. Also in 1972 he founded the ICALP conference series, organising it in Paris. In 1973 he started a series of Spring Schools in France known as "Ecole de Printemps d'Informatique Théorique", that still takes place annually. And in 1975 the first issue of the journal Theoretical Computer Science was published, with Nivat as founding Editor-in-Chief, a role he held for 25 years. Later, he was involved in the foundation of the TAPSOFT and ETAPS conference series, the FOSSACS conference, and many other initiatives.

Since 1983, Maurice Nivat was a corresponding member of the French Academy of Sciences. He was also an officer of both the Légion d'honneur and the Ordre national du Mérite, and a commander of the Ordre des Palmes académiques. He won the EATCS award in 2002. He received honorary doctorates from the University of Bologna in 1997 and the University of Quebec in 2006.

Photo reproduced from https://en.wikipedia.org/wiki/Maurice_Nivat

How to get to Mánes for the conference dinner

By public transport

Starting at the hotel, take tram #22 from the stop Malovanka or #23 from Královka towards the city centre. After approximately 18 minutes, get off at the station Národní divadlo (The National Theatre).

Unless you have a long-term ticket, a single-ride ticket (non-transfer) can be used. It costs 24 CZK and needs to be validated when you enter the tram.

When you leave the tram at the National Theatre, walk back along the tracks to the river, then turn left and follow the riverbank for about 450 meters upstream towards Mánes restaurant and exhibit hall. The tall Štítkov water tower (see image below) will help you find the right direction.

Note that the restaurant is located between the riverbank and the farther end of the island Žofín. The entrance to the restaurant is located on the riverbank. Therefore you should not cross the bridge leading to the island, but instead follow the riverbank for another approximately 270 meters, after passing the bridge that lies about 180 meters from the National Theatre.



By taxi

It is enough to tell the taxi driver to go to "Mánes" or "Restaurant Mánes". From the hotel the taxi will cost approximately 200 CZK, unless you get stuck in traffic.

Coordinates

GPS: 50.0773908N, 14.4138733E

W3W: pipe.good.rifled

Local information

Catering

Lunches and coffee breaks will be served at the conference venue.

Badges

Participants are requested to wear their name badges upon registration during all professional and social activities of ICALP 2018. Badges will serve as tickets for entrance to the conference and to the social events.

Wi-Fi

Wi-Fi will be provided in all rooms of the conference venue without password. Several charging points will be available.

Smoking

Smoking inside the conference venue is not allowed. Smoking outside the building is possible.

Copying

A copying service is provided upon request. Please ask any of the conference assistants. The service is charged.

Taxi

For taxi services, please ask for help at the registration desk. We recommend to use AAA Taxi (yellow cab) or City Taxi. We strongly advise to ask about the price before the ride, and request a receipt.

Emergency and Medical Services

Phone Numbers:

150	Fire Fighters
155	Rescue Squad
158	Police of the Czech Republic
156	Prague City Police
112	European Emergency Number

Important Safety Information

In terms of public safety, Prague is similar to other big European cities. Tourists are sometimes targeted by pickpockets and rogue merchants. As we would like you to spend a lovely and unforgettable time in Prague, some recommendations follow:

- Be careful about your handbags and wallets in any public and especially touristic places where a crowd might be present (even if it does not look like it is actually crowded). Be especially careful if you approach a crowd that looks artificially created in a situation where you would not expect a crowd (such as a half-empty underground train or tram or bus car).
- Be alert when someone stands too close to you in public transport, metro escalators or at the stops, or even touches you pretending it is crowded, regardless if it really is or is not.
- Change money only in the bank, official exchange offices or ATMs or use your credit cards for payments. Be careful when using the ATM.

Foreign Exchange and Banking

The official currency in the Czech Republic is Czech Crown (CZK). One can find many exchange offices and banks in Prague, and it is possible to withdraw CZK at ATMs. All major international cards are accepted in shops, hotels and restaurants.

VAT Refund

All foreign visitors to the Czech Republic (except those coming from countries of the European Union) can apply for value added tax (VAT) refund. In order to get the VAT refund the foreigners must fulfill the following conditions:

- The price of the goods including VAT must exceed 2,000 CZK.
- Goods must be purchased on one day from a retailer marked by a TAX REFUND sign.
- The purchased goods must leave the country within 30 days after the day of purchase.
- VAT refund must be claimed 1) with the same retailer in person or 2) through specialized collecting agencies (such as Global Blue, Global Refund, Premier Tax Free).

How to get VAT refund:

1. At the retailer request the VAT REFUND FORM and the receipt. Fill-in the form including the VAT amount, and have it stamped by the retailer.
2. Have your VAT REFUND FORM validated at the border or at the airport by the Czech Customs Office. If you travel by train you must ask for a Customs officer.
3. a) Stop at any of the specialized collecting agency's refund offices at the border and get the cash; or
b) return home and mail your VAT forms and receipts to any of the specialized collecting agencies, requesting the refund; or c) keep all the forms and receipts and claim the refund with the same retailer during your next trip to the Czech Republic (within 90 days from the day of purchase).

Tax is not refunded on food, cigarettes, alcohol, and petrol.

Electricity

Electricity in the Czech Republic is a 230 V/50 Hz system, with Euro plug (CEE 7/16).

Shops and Shopping Centers

Most shops and shopping centers open the whole week from 10 a.m. to 9 p.m. Big shopping centers are closed during state holidays.