SEA 2015 - Program

Monday, June 29th

8:00 – 8:50	Registration
8:50 – 9:00	Opening
9:00 – 10:00	**Invited talk: Kurt Melhorn** *New results on self-organizing binary search trees*
10:00 – 10:30	Coffee break
10:30 – 11:45	**Session 1: Data structures**
	Leo Ferres, Jose Fuentes, Meng He and Norbert Zhe *Parallel construction of succinct trees*
	Lorenz Hübschle-Schneider and Rajeev Raman *Tree compression with top trees revisited*
	Timo Bingmann, Thomas Keh and Peter Sanders *A bulk-parallel priority queue in external memory with STXXL*
11:45 – 14:00	Lunch break
14:00 – 15:40	**Session 2: Graph Problems I**
	Pierluigi Crescenzi, Gianlorenzo D'Angelo, Lorenzo Severini and Yllka Velaj *Greedily improving our own centrality in a network*
	Takuya Akiba, Yoichi Iwata and Yuki Kawata *An exact algorithm for diameters of large real directed graphs*
	Sebastian Lamm, Peter Sanders and Christian Schulz *Graph partitioning for independent sets*
	Christian Komusiewicz, Kolja Stahl and Manuel Sorge *Finding connected subgraphs of fixed minimum density: Implementation and experiments*
15:40 – 16:15	Coffee break
16:15 – 17:30	**Session 3: Combinatorial Optimization I**
	Stefano Coniglio and Martin Tieves *On the generation of cutting planes which maximize the bound improvement*
	Marco Lübbecke and Jonas Witt *Separation of generic cutting planes in branch-and-price using a basis*
	Claudia D'Ambrosio, Marcia Fampa, Jon Lee and Stefan Vigerske *On a nonconvex MINLP formulation of the Euclidean Steiner tree problems in n-space*
18:00 – 19:00	**Visit in the Musée des Arts Ludiques**

Tuesday, June 30th

9:00 – 10:00	**Invited talk: Alessandra Carbone** *How to find similarities in large datasets of sequences?*
10:00 – 10:30	Coffee break
10:30 – 11:45	**Session 4: Scheduling and Allocation**
	Dimitris Fotakis, Ioannis Milis, Orestis Papadigenopoulos, Emmanouil Zampetakis and Georgios Zois *Scheduling MapReduce jobs and data shuffle on unrelated processors*
	Miguel A. Mosteiro, Yulia Rossikova and Prudence W.H. Wong *Station assignment with reallocation*
	Daniele Diodati, Alfredo Navarra and Cristina M. Pinotti *Online Knapsack of Unknown Capacity: Energy optimization for smartphone communications*
11:45 – 14:00	Lunch break
14:00 – 15:40	**Session 5: Combinatorial Optimization II**
	Gerald Gamrath, Benjamin Hiller and Jakob Witzig *Reoptimization techniques in MIP solvers*
	Andrew Orso, Jon Lee and Siqian Shen *Submodular minimization in the context of modern LP and MILP methods and solvers*
	Daniel Hoske, Dimitar Lukarski, Henning Meyerhenke and Michael Wegner *Is nearly-linear the same in theory and practice? A case study with a combinatorial Laplacian solver*
	Luca Castelli Aleardi, Maks Ovsjankov and Alexandre Nolin *Efficient and practical tree preconditioning for solving Laplacian systems*
15:40 – 16:15	Coffee break
16:15 – 17:30	**Session 6: Miscellaneous I**
	Yann Strozecki, Franck Quessette, Sandrine Vial, Vincent Reinhard, Olivier David and Dominique Barth *Efficient generation of stable planar cages for chemistry*
	Carl Barton, Costas Iliopoulos, Ritu Kundu, Solon Pissis, Ahmad Retha and Fatima Vayani *Accurate and efficient methods to improve multiple circular sequence alignment*
	Jan-Philipp W. Kappmeier, Daniel R. Schmidt and Melanie Schmidt *Solving k-means on high-dimensional big data*
18:00 – 19:00	**Visit in Tower Zamansky**
20:00	**Conference dinner**

Wednesday, July 1st

9:00 – 10:00	**Invited talk: Erik Demaine** *Replicators, transformers, and robot swarms: Science fiction through geometric algorithms*
10:00 – 10:30	Coffee break
10:30 – 11:45	**Session 7: Transportation Networks**
	Daniel Delling, Julian Dibbelt, Thomas Pajor and Renato F. Werneck *Public transit labeling*
	Aaron Schild and Christian Sommer *On balanced separators in road networks*
	Alexandros Efentakis, Dieter Pfoser and Yannis Vassiliou *SALT. A unified framework for all shortest-path query variants on road networks*
11:45 – 14:00	Lunch break
14:00 – 15:40	**Session 8: Miscellaneous II**
	Boran Adas, Ersin Bayraktar and M. Oguzhan Kulekci *Huffman codes versus augmented non-prefix-free codes*
	Riku Saikkonen, Seppo Sippu and Eljas Soisalon-Soininen *Experimental analysis of an online dictionary matching algorithm for regular expressions with gaps*
	John Fearnley, Tobenna Peter Igwe and Rahul Savani *An empirical study of finding approximate equilibria in bimatrix games*
	Michael Bekos, Michael Kaufmann, Robert Krug and Martin Siebenhaller *The effect of almost-empty faces on planar Kandinsky drawings*
15:40 – 16:15	Coffee break
16:15 – 17:30	**Session 9: Graph Problems II**
	Stefan Fafianie and Stefan Kratsch *An experimental analysis of a polynomial compression for the Steiner cycle problem*
	Borzou Rostami, Federico Malucelli, Davide Frey and Christoph Buchheim *On the quadratic shortest path problem*
	Thomas Bosman *Solution merging heuristic for the Steiner problem in graphs using tree decomposition*
17:30 – 17:40	**Closing**