

## Monday, September 23rd

9:00 – 9:10 **Welcome**

*Dorothea Wagner*

9:10 – 9:40 **Peter Sanders**

*Parallel Algorithms Reconsidered*

9:40 – 10:10 **Henning Meyerhenke**

*Engineering High-Performance Community Detection Heuristics for Massive Graphs*

10:10 – 10:40 **Andrea Kappes**

*Graph Clustering with the Louvain Method*

10:40 – 11:00 **Break**

11:00 – 11:30 **Jyrki Katajainen**

*Seeking for the Best Priority Queue: Lessons Learnt*

11:30 – 12:00 **Katharina A. Zweig**

*A new algorithm for solving the All-Pairs-Shortest-Paths problem*

12:00 – 12:05 **Renato Werneck**

*11-th DIMACS Implementation Challenge*

12:15 **Lunch**

15:30 – 16:00 **Coffee & Cake**

16:00 – 16:30 **Kevin Buchin**

*New Algorithms for Computing the Greedy Spanner*

16:30 – 17:00 **Giuseppe F. Italiano**

*Engineering Algorithms for Color Barcodes*

17:00 – 17:45 **Panel: Empirical and Theoretical Approaches to Algorithm Design: Synergies and Opportunities**

*Moderator: Dorothea Wagner*

18:00 **Dinner**

## Tuesday, September 24th

9:00 – 9:30 **David Johnson**

*The TSP for random points in the unit square: an experimental and statistical study*

9:30 – 10:00 **Jon Bentley**

*Engineering Little Algorithms into a Big System*

10:00 – 10:30 **Renato Werneck**

*An Exact Combinatorial Algorithm for Graph Bisection*

10:30 – 11:00 **Break**

11:00 – 12:00 **Panel: Benchmarks and reproducibility of experiments**

*Moderator: Andrew Goldberg*

12:15 **Lunch**

15:30 – 16:00 **Coffee & Cake**

16:00 – 16:30 **Frank Dehne**

*Real-Time On-line Analytical Processing (OLAP) On Cloud Architectures*

16:30 – 17:00 **Yoshio Okamoto**

*Enumeration algorithms: polynomial time by branch and bound versus exponential time by ZDDs*

17:00 – 17:45 **Shin-ichi Minato**

*The Art of Discrete Structure Manipulation Based on BDDs and ZDDs*

18:00 **Dinner**

## Wednesday, September 25th

9:00 – 9:30 **Andrew Goldberg**  
*The Hub Labeling Algorithm*

9:30 – 10:00 **Christos Zaroliagis**  
*Improved Alternative Route Planning*

10:00 – 10:30 **Daniel Delling**  
*Customizable Route Planning in Road Networks*

10:30 – 11:00 **Break**

11:00 – 11:30 **Julian Dibbelt**  
*Multimodal Route Planning*

11:30 – 12:00 **Bob Bixby**  
*TBA*

12:15 **Lunch**

14:30 **Excursion**

18:00 **Dinner**

## Thursday, September 26th

9:00 – 9:30 **Holger Hoos**

*Machine Learning & Optimisation: Promise and Power of Data-driven, Automated Algorithm Design*

9:30 – 10:00 **Roger Wattenhofer**

*Consistent Updates in Software Defined Networks*

10:00 – 10:30 **Maria Papatriantafidou**

*Role of concurrent data structures in efficient computations of massive streamed data - with "smart grid" systems as a case study*

10:30 – 11:00 **Break**

11:00 – 11:30 **Hannah Bast**

*Algorithm Engineering Issues in Semantic Search*

11:30 – 12:00 **Uli Meyer**

*I/O-efficient hierarchical diameter approximation*

12:00 – 12:10 **Jon Bentley**

*Remarks on the Discussions*

12:15 **Lunch**

15:30 – 16:00 **Coffee & Cake**

16:00 – 16:30 **Kurt Mehlhorn**

*The Computational Complexity of Virtual Address Translation*

16:30 – 17:00 **Juergen Lerner**

*GraphML-Time: a file format for dynamic graphs*

17:00 – 17:45 **Panel: Promoting and advancing the field**

*Moderator: David Jonson*

18:00 **Dinner**

## Friday, September 27th

9:00 – 9:30 **Holger Hoos**

*A Bootstrap Approach to Analysing the Scaling of Empirical Runtime Data with Problem Size*

9:30 – 10:00 **Sabine Storandt**

*Facility Location Problems in Street Network*

10:00 – 10:30 **Falk Huffner**

*Fixed-Parameter and Integer Programming Approaches for Clustering Problems*

10:30 – 11:00 **Break**

11:00 – 12:00 **Matthias Muller-Hannemann**

*Teaching AE*

12:15 **Lunch**