SODA10 Schedule

Sunday, January 17

Concurrent Sessions
9:00 AM - 11:05 AM

Session 1A
9:00 AM
On the Optimality of Spiral Search
Elmar Langetepe, University of Bonn, Germany

9:25 AM
An Improved Competitive Algorithm for Reordering Buffer Management
Noa Avigdor-Elgrabli, Technion-Israel Institute of Technology - Israel; Yuval Rabani, The Hebrew University of Jerusalem, Israel

9:50 AM
How to Meet Asynchronously (Almost) Everywhere
Jurek Czyzowicz, Arnaud Labourel and Andrzej Pelc, Université du Québec en Outaouais, Canada

10:15 AM
A 1.43-Competitive Online Graph Edge Coloring Algorithm in the Random Order Arrival Model Bahman Bahmani, Stanford University; Aranyak Mehta, Google, Inc.; Rajeev Motwani, Stanford University

10:40 AM
Towards the Randomized k-Server Conjecture: A Primal-Dual Approach
Nikhil Bansal, IBM T.J. Watson Research Center; Niv Buchbinder, Microsoft Research; Joseph (Seffi) Naor, Technion, Israel

Session 1B
9:00 AM
Testing Monotone Continuous Distributions on High-dimensional Real Cubes
Michal Adamaszek and Artur Czumaj, University of Warwick, United Kingdom; Christian Sohler, Technische Universität Dortmund, Germany

9:25 AM
Property Testing and Parameter Testing for Permutations
Carlos Hoppen and Yoshiharu Kohayakawa, Instituto de Matemática e Estatística, Brazil, Carlos Gustavo Moreira, Instituto de Matemática Pura e Aplicada, Brazil; Rudini Menezes Sampaio, Universidade Federal do Ceará, Brazil

9:50 AM
Near-Optimal Sublinear Time Algorithms for Ulam Distance
Alexandr Andoni and Huy L. Nguyen, Princeton University

10:15 AM
Lower Bounds for Testing Triangle-freeness in Boolean Functions
Arnab Bhattacharyya and Ning Xie, Massachusetts Institute of Technology

10:40 AM
Counting Stars and Other Small Subgraphs in Sublinear Time
Mira Gonen, Dana Ron and Yuval Shavitt, Tel-Aviv University, Israel

Session 1C
9:00 AM
Cell-Probe Lower Bounds for Succinct Partial Sums
Mihai Pătraşcu, AT&T Labs; Emanuele Viola, Northeastern University

9:25 AM
On the Cell Probe Complexity of Dynamic Membership
Ke Yi and Qin Zhang, Hong Kong University of Science and Technology, Hong Kong

9:50 AM
Fully-Functional Succinct Trees
Kunihiko Sadakane, National Institute of Informatics, Japan; Gonzalo Navarro, University of Chile, Chile

10:15 AM
Data Structures for Range Minimum Queries in Multidimensional Arrays
Hao Yuan and Mikhail J. Atallah, Purdue University

10:40 AM
Counting Inversions, Offline Orthogonal Range Counting, and Related Problems
Timothy M. Chan, University of Waterloo, Canada; Mihai Pătraşcu, AT&T Labs

Coffee Break
11:05 AM - 11:30 AM

Invited Plenary Session
Session 2
11:30 AM - 12:30 PM
Differential Privacy in New Settings
Cynthia Dwork, Microsoft Research

Luncheon
12:30 PM - 2:00 PM

Concurrent Sessions
2:00 PM - 4:05 PM

Session 3A
2:00 PM
Lower Bounds for Edit Distance and Product Metrics via Poincaré-Type Inequalities
Alexandr Andoni, Princeton University, T. S. Jayram, IBM Almaden; Mihai Pătraşcu, AT&T Labs

2:25 PM
Genus and the Geometry of the Cut Graph
James R. Lee, University of Washington; Anastasios Sidiropoulos, Toyota Technological Institute at Chicago

2:50 PM
Testing Planarity of Partially Embedded Graphs
Patrizio Angelini, Giuseppe Di Battista and Fabrizio Frati, Roma Tre University, Italy; Vít Jelínek, Charles University, Czech Republic and Reykjavík University, Iceland; Jan Kratochvíl, Charles University, Czech Republic; Maurizio Patrignani, Roma Tre University, Italy; Ignaz Rutter, Karlsruhe Institute of Technology, Germany

3:15 PM
Inapproximability for Planar Embedding Problems
Jeff Edmonds, York University, Canada; Anastasios Sidiropoulos and Anastasios Zouzias, University of Toronto, Canada

3:40 PM
Towards a Calculus for Non-linear Spectral Gaps
Manor Mendel, The Open University of Israel, Israel; Assaf Naor, Courant Institute of Mathematical Sciences, New York University

Session 3B
2:00 PM
A QPTAS for TSP with Fat Weakly Disjoint Neighborhoods in Doubling Metrics
T-H. Hubert Chan, University of Hong Kong, Hong Kong; Khaled Elbassioni, Max-Planck-Institut für Informatik, Germany

2:25 PM
PTAS for Maximum Weight Independent Set Problem with Random Weights in Bounded Degree Graphs
David Gamarnik, David Goldberg and Theophane Weber, Massachusetts Institute of Technology

2:50 PM
Belief Propagation for Min-cost Network Flow: Convergence & Correctness
David Gamarnik, Devavrat Shah and Yehua Wei, Massachusetts Institute of Technology

3:15 PM
Finding the Jaccard Median
Flavio Chierichetti, Sapienza University of Rome, Italy; Ravi Kumar, Sandeep Pandey, and Sergei Vassilvitskii, Yahoo! Research

3:40 PM
The Focus of Attention Problem
Dries Goossens, Sergey Polyakovskiy and Frits C. R. Spieksma, Katholieke Universiteit Leuven, Belgium; Gerhard J. Woeginger, TU Eindhoven, The Netherlands

Session 3C
2:00 PM
Recognizing a Totally Odd K4-subdivision, Parity 2-disjoint Rooted Paths and a Parity Cycle through Specified Elements
Ken-ichi Kawarabayashi, National Institute of Informatics, Japan; Zhentao Li, McGill University, Canada; Bruce Reed, McGill University, Canada, and CNRS, France

2:25 PM
Decomposition, Approximation, and Coloring of Odd-Minor-Free Graphs
Erik D. Demaine, Massachusetts Institute of Technology; MohammadTaghi Hajiaghayi, AT&T Labs -- Research; Ken-ichi Kawarabayashi, National Institute for Informatics, Japan

2:50 PM
The Edge Disjoint Paths Problem in Eulerian Graphs and 4-edge-connected Graphs
Ken-ichi Kawarabayashi, National Institute of Informatics, Japan; Yusuke Kobayashi, University of Tokyo, Japan

3:15 PM
On Brambles, Grid-Like Minors, and Parameterized Intractability of Monadic Second Order Logic
Stephan Kreutzer, University of Oxford, United Kingdom; Siamak Tazari, Humboldt Universität zu Berlin, Germany

3:40 PM
An (almost) Linear Time Algorithm For Odd Cycles Transversal
Ken-ichi Kawarabayashi, National Institute of Informatics, Japan; Bruce Reed, McGill University, Canada

Coffee Break
4:05 PM - 4:30 PM

Best Paper Presentation
4:30 PM – 5:05 PM
An O(log n/log log n)-approximation Algorithm for the Asymmetric Traveling Salesman Problem
Arash Asadpour, Stanford University; Michel X. Goemans and Aleksander Madry, Massachusetts Institute of Technology; Shayan Oveis Gharan and Amin Saberi, Stanford University

Intermission
5:05 PM – 5:10 PM

Concurrent Sessions
5:10 PM - 6:50 PM

Session 4A
5:10 PM
A Quasi-polynomial Time Approximation Scheme for Euclidean Capacitated Vehicle Routing
Aparna Das and Claire Mathieu, Brown University

5:35 PM
Region Growing for Multi-route Cuts
Siddharth Barman and Shuchi Chawla, University of Wisconsin - Madison

6:00 PM
Asymmetric Traveling Salesman Path and Directed Latency Problems
Zachary Friggstad, Mohammad R. Salavatipour and Zoya Svitkina, University of Alberta, Canada

6:25 PM
Improved Approximation Algorithms for the Minimum Latency Problem via Prize-Collecting Strolls
Aaron Archer, AT&T Labs -- Research; Anna Blasiak, Cornell University

Session 4B
5:10 PM
Quantum Algorithms for Highly Non-linear Boolean Functions
Martin Rötteler, NEC Laboratories America

5:35 PM
Compact Ancestry Labeling Schemes for XML Trees
Pierre Fraigniaud and Amos Korman, CNRS, France, and University Paris Diderot, France

6:00 PM
Generating a d-dimensional Linear Subspace Efficiently
Raphael Yuster, University of Haifa, Israel

6:25 PM
Algorithms for Ray Class Groups and Hilbert Class Fields
Kirsten Eisenträger and Sean Hallgren, Penn State University

Session 4C
5:10 PM
A Space-Time Tradeoff for Permutation Problems
Mikko Koivisto and Pekka Parviainen, University of Helsinki, Finland

5:35 PM
Algorithmic Lower Bounds for Problems Parameterized by Clique-width
Fedor V. Fomin, Petr A. Golovach, Daniel Lokshtanov and Saket Saurabh, University of Bergen, Norway

6:00 PM
Bidimensionality and Kernels
Fedor V. Fomin and Daniel Lokshtanov, University of Bergen, Norway; Saket Saurabh, The Institute of Mathematical Sciences, India; Dimitrios M. Thilikos, Department of Mathematics, National and Kapodistrian University of Athens, Greece

6:25 PM
Solving MAX-r-SAT Above a Tight Lower Bound
Noga Alon, Tel Aviv University, Israel; Gregory Gutin and Eun Jung Kim, University of London, United Kingdom; Stefan Szeider, Vienna University of Technology; Anders Yeo, University of London, United Kingdom

Monday, January 18

Concurrent Sessions
9:00 AM - 11:05 AM

Session 5A
9:00 AM
Inapproximability for VCG-Based Combinatorial Auctions
Dave Buchfuhrer, California Institute of Technology; Shaddin Dughmi, Stanford University; Hu Fu and Robert Kleinberg, Cornell University; Elchanan Mossel, University of California, Berkeley and Weizmann Institute, Israel; Christos Papadimitriou, University of California, Berkeley; Michael Schapira, Yale University and University of California, Berkeley; Yaron Singer, University of California, Berkeley; Chris Umans, California Institute of Technology

9:25 AM
Price of Anarchy for Greedy Auctions
Brendan Lucier and Allan Borodin, University of Toronto, Canada

9:50 AM
Incentive Compatible Budget Elicitation in Multi-unit Auctions
Sayan Bhattacharya, Vincent Conitzer, Kamesh Munagala and Lirong Xia, Duke University

10:15 AM
Utilitarian Mechanism Design for Multi-Objective Optimization
Fabrizio Grandoni, Università di Roma Tor Vergata, Italy; Piotr Krysta, University of Liverpool, United Kingdom; Stefano Leonardi, Sapienza Università di Roma, Italy; Carmine Ventre, University of Liverpool, United Kingdom

10:40 AM
Pricing Randomized Allocations
Patrick Briest, University of Paderborn, Germany; Shuchi Chawla, University of Wisconsin - Madison; Robert Kleinberg and S. Matthew Weinberg, Cornell University

Session 5B
9:00 AM
Universal Є-approximators for Integrals
Michael Langberg, The Open University of Israel, Israel; Leonard J. Schulman, California Institute of Technology

9:25 AM
Optimally Reconstructing Weighted Graphs Using Queries
Hanna Mazzawi, Technion - Israel Institute of Technology, Israel

9:50 AM
Online Learning with Queries
Chao-Kai Chiang, Academia Sinica, Taiwan and National Taiwan University, Taiwan; Chi-Jen Lu, Academia Sinica, Taiwan

10:15 AM
Coresets and Sketches for High Dimensional Subspace Approximation Problems
Dan Feldman, Tel Aviv University; Israel; Morteza Monemizadeh and Christian Sohler, University of Dortmund, Germany; David P. Woodruff, IBM Almaden Research Center

10:40 AM
Convergence, Stability, and Discrete Approximation of Laplace Spectra
Tamal K. Dey, Pawas Ranjan and Yusu Wang, The Ohio State University

Session 5C
9:00 AM
Sharp Kernel Clustering Algorithms and their Associated Grothendieck Inequalities
Subhash Khot and Assaf Naor, Courant Institute of Mathematical Sciences, New York University

9:25 AM
Fast SDP Algorithms for Constraint Satisfaction Problems
David Steurer, Princeton University

9:50 AM
Probabilistic Analysis of the Semidefinite Relaxation Detector in Digital Communications
Anthony Man-Cho So, The Chinese University of Hong Kong, Hong Kong

10:15 AM
Correlation Clustering with Noisy Input
Claire Mathieu and Warren Schudy, Brown University

10:40 AM
A Polynomial Time Approximation Scheme for k-Consensus Clustering
Tom Coleman and Anthony Wirth, The University of Melbourne, Australia

Coffee Break
11:05 AM - 11:30 AM

Invited Plenary Session
Session 6
11:30 AM - 12:30 PM
Google's Auction for TV Ads
Noam Nisan, Hebrew University, Israel

Lunch (attendees on their own)
12:30 PM - 2:00 PM

Concurrent Sessions
2:00 PM - 4:05 PM

Session 7A
2:00 PM
A Nearly Optimal Algorithm for Approximating Replacement Paths and k Shortest Simple Paths in General Graphs
Aaron Bernstein, Massachusetts Institute of Technology

2:25 PM
Solving the Replacement Paths Problem for Planar Directed Graphs in O(n log n) Time
Christian Wulff-Nilsen, University of Copenhagen, Denmark

2:50 PM
Bounding Variance and Expectation of Longest Path Lengths in DAGs
Jeff Edmonds, York University, Canada; Supratik Chakraborty, Indian Institute of Technology Bombay, India

3:15 PM
Highway Dimension, Shortest Paths, and Provably Efficient Algorithms
Ittai Abraham, Microsoft Research Silicon Valley; Amos Fiat, Tel-Aviv University, Israel; Andrew V. Goldberg and Renato F. Werneck, Microsoft Research Silicon Valley

3:40 PM
Maximum Flows and Parametric Shortest Paths in Planar Graphs
Jeff Erickson, University of Illinois, Urbana-Champaign

Session 7B
2:00 PM
On the Equilibria of Alternating Move Games
Aaron Roth, Carnegie Mellon University; Maria Florina Balcan, Georgia Institute of Technology; Adam Kalai, Microsoft Research; Yishay Mansour, Google Research and Tel Aviv University, Israel

2:25 PM
Monotonicity in Bargaining Networks
Yossi Azar, Tel Aviv University, Israel; Nikhil Devanur and Kamal Jain, Microsoft Research; Yuval Rabani, The Hebrew University of Jerusalem, Israel

2:50 PM
Sharp Dichotomies for Regret Minimization in Metric Spaces
Robert Kleinberg, Cornell University; Aleksandrs Slivkins, Microsoft Research

3:15 PM
Solving Simple Stochastic Tail Games
Hugo Gimbert, CNRS, France, and Université Bordeaux 1, France; Florian Horn; CNRS, France, and Université Paris 7, France

3:40 PM
One-Counter Markov Decision Processes
Tomas Brázdil, Masaryk University, Czech Republic; Vaclav Brožek and Kousha Etessami, University of Edinburgh, United Kingdom; Antonin Kučera, Masaryk University, Czech Republic; Dominik Wojtczak, CWI, Amsterdam, The Netherlands

Session 7C
2:00 PM
On Nonlinear Forbidden 0-1 Matrices: A Refutation of a Füredi-Hajnal Conjecture
Seth Pettie, University of Michigan

2:25 PM
An Improved Construction of Progression-Free Sets Michael Elkin, Ben-Gurion University of the Negev, Israel

2:50 PM
Geometric Optimization and Sums of Algebraic Functions
Antoine Vigneron, INRA, France

3:15 PM
Approximating the Crossing Number of Graphs Embeddable in Any Orientable Surface
Petr Hliněný, Masaryk University, Czech Republic; Markus Chimani, TU Dortmund, Germany

3:40 PM
How Far Can You Reach?
Ciprian Borcea, Rider University; Ileana Streinu, Computer Science Department, Smith College

Coffee Break
4:05 PM - 4:30 PM

Session 8A
4:30 PM
A Model of Computation for MapReduce
Howard Karloff, AT&T Labs-Research; Siddharth Suri and Sergei Vassilvitskii, Yahoo! Research

4:55 PM
Synchrony and Asynchrony in Neural Networks
Fabian Kuhn, University of Lugano, Switzerland; Konstantinos Panagiotou, Max-Planck-Institute for Computer Science, Germany; Joel Spencer, Courant Institute of Mathematical Sciences, New York University; Angelika Steger, ETH Zurich, Switzerland

5:20 PM
Distributed Agreement with Optimal Communication Complexity
Seth Gilbert, Ecole Polytechnique Federale de Lausanne, Switzerland; Dariusz R. Kowalski, University of Liverpool, United Kingdom

5:45 PM
How Good is the Chord Algorithm?
Constantinos Daskalakis, Massachusetts Institute of Technology; Ilias Diakonikolas and Mihalis Yannakakis, Columbia University

6:10 PM
Deterministic Algorithms for the Lovász Local Lemma
Karthekeyan Chandrasekaran, Georgia Institute of Technology; Navin Goyal, Microsoft Research, India; Bernhard Haeupler, Massachusetts Institute of Technology

Session 8B
4:30 PM
A Deterministic Truthful PTAS for Scheduling Related Machines
George Christodoulou, Max-Planck Institut für Informatik, Germany; Annamária Kovács, Goethe University, Germany

4:55 PM
A Fourier Space Algorithm for Solving Quadratic Assignment Problems
Risi Kondor, California Institute of Technology

5:20 PM
EDF-schedulability of Synchronous Periodic Task Systems is coNP-hard
Friedrich Eisenbrand, Institute of Mathematics, EPFL, Lausanne, Switzerland; Thomas Rothvoß, Institute of Mathematics, EPFL, Switzerland

5:45 PM
Reconstructing Approximate Phylogenetic Trees from Quartet Samples
Sagi Snir and Raphael Yuster, University of Haifa, Israel

6:10 PM
Shape Replication Through Self-Assembly and RNase Enzymes
Zachary Abel, Harvard University; Nadia Benbernou, Massachusetts Institute of Technology; Mirela Damian, Villanova University; Erik D. Demaine and Martin Demaine, Massachusetts Institute of Technology; Robin Flatland, Siena College; Skott D. Kominers, Harvard University; Robert Schweller, University of Texas-Pan American

Session 8C
4:30 PM
On the Possibility of Faster SAT Algorithms
Mihai Pătraşcu, AT&T Labs; Ryan Williams, IBM Almaden Research Center

4:55 PM
Paired Approximation Problems and Incompatible Inapproximabilities
David Eppstein, University of California, Irvine

5:20 PM
Correlation Robust Stochastic Optimization
Shipra Agrawal, Yichuan Ding, Amin Saberi and Yinyu Ye, Stanford University

5:45 PM
Approximability of Robust Network Design
Neil Olver, and F. Bruce Shepherd, McGill University, Canada

6:10 PM
Differentially Private Approximation Algorithms
Anupam Gupta and Katrina Ligett, Carnegie Mellon University; Frank McSherry, Microsoft Research; Aaron Roth, Carnegie Mellon University; Kunal Talwar, Microsoft Research

Business Meeting
7:00 PM -8:00 PM

Tuesday, January 19

Concurrent Sessions
9:00 AM - 11:05 AM

Session 9A
9:00 AM
Efficiently Decodable Non-adaptive Group Testing
Piotr Indyk, Massachusetts Institute of Technology; Hung Q. Ngo and Atri Rudra, University at Buffalo, SUNY

9:25 AM
1-pass Relative-Error Lp-Sampling with Applications
Morteza Monemizadeh, University of Dortmund, Germany; David P. Woodruff, IBM Almaden Research Center

9:50 AM
On the Exact Space Complexity of Sketching and Streaming Small Norms
Daniel M. Kane, Harvard University, Jelani Nelson, Massachusetts Institute of Technology, David P. Woodruff, IBM Almaden Research Center

10:15 AM
A Locality-sensitive Hash for Real Vectors
Tyler Neylon, Bynomial, Inc.

10:40 AM
Lower Bounds for Sparse Recovery
Khanh Do Ba, Piotr Indyk and Eric Price, Massachusetts Institute of Technology; David P. Woodruff, IBM Almaden

Session 9B
9:00 AM
Flow-Cut Gaps for Integer and Fractional Multiflows
Chandra Chekuri, University of Illinois, Urbana-Champaign; F. Bruce Shepherd and Christophe Weibel, McGill University, Canada

9:25 AM
A Max-Flow/Min-Cut Algorithm for a Class of Wireless Networks
S. M. Sadegh Tabatabaei Yazdi and Serap A. Savari, Texas A&M University

9:50 AM
Testing Additive Integrality Gaps
Friedrich Eisenbrand, Nicolai Hähnle, Dömötör Pálvölgyi and Gennady Shmonin, Ecole Polytechnique Fédérale de Lausanne, Switzerland

10:15 AM
Classified Stable Matching
Chien-Chung Huang, Max-Planck-Institut für Informatik, German

10:40 AM
Basis Reduction and the Complexity of Branch-and-Bound
Gábor Pataki, University of North Carolina, Chapel Hill; Mustafa Tural, University of Minnesota; Erick B. Wong, University of British Columbia, Canada

Session 9C
9:00 AM
Randomized Shellsort: A Simple Oblivious Sorting Algorithm
Michael T. Goodrich, University of California, Irvine

9:25 AM
Data-Specific Analysis of String Sorting
Raimund Seidel, Universität des Saarlandes, Germany

9:50 AM
Fast Distance Multiplication of Unit-Monge Matrices
Alexander Tiskin, University of Warwick, United Kingdom

10:15 AM
Regular Expression Matching with Multi-Strings and Intervals
Philip Bille, Technical University of Denmark, Denmark; Mikkel Thorup, AT&T Labs-Research

10:40 AM
Road Network Reconstruction for Organizing Paths
Daniel Chen and Leonidas J. Guibas, Stanford University; John Hershberger, Mentor Graphics; Jian Sun, Stanford University

Coffee Break
11:05 AM - 11:30 AM

Invited Plenary Session
Session 10
11:30 AM - 12:30 PM
The Power of Convex Relaxation: The Surprising Stories of Matrix Completion and Compressed Sensing
Emmanuel Candes, Stanford University

Lunch (attendees on their own)
12:30 PM - 2:00 PM

Concurrent Sessions
2:00 PM - 4:05 PM

Session 11A
2:00 PM
An Online Scalable Algorithm for Average Flow Time in Broadcast Scheduling
Sungjin Im and Benjamin Moseley, University of Illinois, Urbana-Champaign

2:25 PM
Resource Minimization for Fire Containment
Parinya Chalermsook, University of Chicago; Julia Chuzhoy, Toyota Technological Institute

2:50 PM
Algorithms and Complexity for Periodic Real-Time Scheduling
Vincenzo Bonifaci, Max-Planck-Institut für Informatik, Germany and Università dell'Aquila, Italy; Ho-Leung Chan, The University of Hong Kong, Hong Kong; Alberto Marchetti-Spaccamela, Sapienza Università di Roma, Italy; Nicole Megow, Max-Planck-Institut für Informatik, Germany

3:15 PM
Energy Efficient Scheduling for Data Centers via Partial Shutdown
Samir Khuller, Jian Li and Barna Saha, University of Maryland, College Park

3:40 PM
SRPT is 1.86-Competitive for Completion Time Scheduling
Christine Chung, University of Pittsburgh; Tim Nonner, Albert Ludwigs University of Freiburg, Germany; Alexander Souza, Humboldt University of Berlin, Germany

Session 11B
2:00 PM
The Rank of Diluted Random Graphs
Charles Bordenave, Université de Toulouse and CNRS, France; Marc Lelarge, INRIA - École Normale Supérieure, France

2:25 PM
The Scaling Window for a Random Graph with a Given Degree Sequence
Hamed Hatami and Michael Molloy, University of Toronto, Canada

2:50 PM
Efficient Broadcast on Random Geometric Graphs
Milan Bradonjić, Los Alamos National Laboratory; Robert Elsässer, University of Paderborn, Germany; Tobias Friedrich, Max-Planck-Institut für Informatik, Germany; Thomas Sauerwald, Simon Frasier University, Canada; Alexandre Stauffer, University of California, Berkeley

3:15 PM
Speeding Up Random Walks with Neighborhood Exploration
Petra Berenbrink, Simon Fraser University; Colin Cooper, King's College London, United Kingdom; Robert Elsässer, University of Paderborn, Germany; Tomasz Radzik, King's College London, United Kingdom; Thomas Sauerwald, Simon Fraser University, Canada

3:40 PM
Vertices of Degree k in Random Maps
Daniel Johannsen and Konstantinos Panagiotou, Max-Planck-Institute für Informatik, Germany

Session 11C
2:00 PM
Cache-Oblivious Dynamic Dictionaries with Update/Query Tradeoff
Gerth Stølting Brodal, Aarhus University, Denmark; Erik D. Demaine and Jeremy T. Fineman, Massachusetts Institute of Technology; John Iacono, Polytechnic Institute of New York University; Stefan Langerman, Université Libre de Bruxelles, Belgium; J. Ian Munro, University of Waterloo, Canada

2:25 PM
Applications of Forbidden 0-1 Matrices to Search Trees and Path Compression-Based Data Structures
Seth Pettie, University of Michigan

2:50 PM
Faster Exponential Time Algorithms for the Shortest Vector Problem
Daniele Micciancio and Panagiotis Voulgaris, University of California, San Diego

3:15 PM
Streaming Algorithms for Extent Problems in High Dimensions
Pankaj K. Agarwal and R. Sharathkumar, Duke University

3:40 PM
Deletion Without Rebalancing in Balanced Binary Trees
Siddhartha Sen, Princeton University; Robert E. Tarjan, Princeton University and HP Laboratories

Coffee Break
4:05 PM - 4:30 PM

Concurrent Sessions
4:30 PM - 6:35 PM

Session 12A
4:30 PM
On Linear and Semidefinite Programming Relaxations for Hypergraph Matching
Yuk Hei Chan and Lap Chi Lau, The Chinese University of Hong Kong

4:55 PM
Partition Constrained Covering of a Symmetric Crossing Supermodular Function by a Graph
Attila Bernáth, Eötvös University, Hungary; Roland Grappe and Zoltán Szigeti, CNRS, France

5:20 PM
Tree Embeddings for Two-Edge-Connected Network Design
Anupam Gupta, Ravishankar Krishnaswamy and R. Ravi, Carnegie Mellon University

5:45 PM
A Constant Factor Approximation Algorithm for Generalized Min-Sum Set Cover
Nikhil Bansal, IBM T.J. Watson Research Center; Anupam Gupta and Ravishankar Krishnaswamy, Carnegie Mellon University

Session 12B
4:30 PM
Self-improving Algorithms for Convex Hulls
Kenneth L. Clarkson, IBM Almaden Research Center; Wolfgang Mulzer, Princeton University; C. Seshadhri, IBM Almaden Research Center

4:55 PM
The Forest Hiding Problem
Adrian Dumitrescu, University of Wisconsin-Milwaukee; Minghui Jiang, Utah State University

5:20 PM
Terrain Guarding is NP-Hard
James King, McGill University, Canada; Erik Krohn, University of Iowa

5:45 PM
Hardness Results of Homology Localization
Chao Chen, Institute of Science and Technology, Austria and Vienna University of Technology, Austria; Daniel Freedman, Hewlett-Packard Laboratories, Israel

6:10 PM
Orthogonal Ham-Sandwich Theorem in R3
Sergey Bereg, University of Texas at Dallas

Session 12C

4:30 PM
The (1+ß)-Choice Process and Weighted Balls-into-Bins
Yuval Peres, Microsoft Research - Redmond; Kunal Talwar and Udi Wieder, Microsoft Research - Silicon Valley

4:55 PM
Quasirandom Load Balancing
Tobias Friedrich, Max-Planck-Institut für Informatik, Germany; Martin Gairing, University of Liverpool, United Kingdom; Thomas Sauerwald, Simon Fraser University, Canada

5:20 PM
Thin Partitions: Isoperimetric Inequalities and a Sampling Algorithmfor Star Shaped Bodies
Karthekeyan Chandrasekaran, Daniel Dadush and Santosh Vempala, Georgia Institute of Technology

5:45 PM
Phase Transition for the Mixing Time of the Glauber Dynamics for Coloring Regular Trees
Prasad Tetali, Georgia Institute of Technology; Juan C. Vera, University of Waterloo, Canada; Eric Vigoda and Linji Yang, Georgia Institute of Technology

6:10 PM
Rumour Spreading and Graph Conductance
Flavio Chierichetti, Silvio Lattanzi and Alessandro Panconesi, Sapienza Universià di Roma, Italy