June 13–15, 2015 Portland, OR, USA



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# **SPAA'15**

## Proceedings of the 27th ACM Symposium on Parallelism in Algorithms and Architectures

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**ISBN:** 978-1-4503-3588-1

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### Foreword

This volume consists of papers that were presented at the 27th ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2015) held on 13–15 June 2015, in Portland, Oregon, USA, as part of Federated Computing Research Conference (FCRC 2015). SPAA 2015 was sponsored by the ACM Special Interest Groups on Algorithms and Computation Theory (SIGACT) and Computer Architecture (SIGARCH) and organized in cooperation with the European Association for Theoretical Computer Science (EATCS). Financial support was provided by Akamai, Oracle Labs, and Intel Labs.

We received a total of 131 submissions and the program committee selected 31 papers for full presentation. Of these papers, "Speed Scaling in the Non-clairvoyant Model" by Yossi Azar, Nikhil Devanur, Zhiyi Huang, and Debmalya Panigrahi was selected to receive the Best Paper Award. In addition, the PC selected 11 papers to be presented as brief announcements. Finally, this year's program also included two invited talks: "Myths and Misconceptions about Threads" by Hans-J Boehm and "The Revolution in Graph Theoretic Optimization Problems" by Gary Miller.

The mix of selected papers reflects the unique nature of SPAA in bringing together the theory and practice of parallel computing. SPAA defines parallelism broadly to encompass any computational device or scheme that can perform multiple operations or tasks simultaneously or concurrently. The technical papers in this volume are to be considered preliminary versions, and authors are generally expected to publish polished and complete versions in archival scientific journals. The committee's decisions in accepting brief announcements were based on the perceived interest of these contributions, with the goal that they serve as bases for further significant advances in parallel computing. Extended versions of the SPAA brief announcements may be published later in other conferences or journals.

The reviewing process consisted of multiple steps. Each paper received a minimum of 3 reviews in the initial phase. After this phase, the authors were given a chance to reply to the reviews during a 2-day rebuttal period. After all the rebuttals were received, there was extensive online discussion of the papers over a period of a week and additional reviews were solicited for some papers. The final decisions were made during a phone meeting on March 10.

We would like to thank the program committee as well as the external reviewers for their help during the review and paper selection process. Last, but not least, we want to thank all the authors who submitted papers. The authors, the external reviewers, and the program committee together made it possible to select a great collection of papers for the conference.

### Kunal Agrawal

### **Guy Blelloch**

Washington University in St. Louis SPAA 2015 Program Chair Carnegie Mellon University SPAA 2015 General Chair

### **Table of Contents**

S	SPAA 2015 Symposium Organizationix		
S	PAA 2015 Sponsors & Supporters	xi	
	ession 1: Sorting ssion Chair: Bradley Kuzsmaul (Massachusetts Institute of Technology)		
•	<b>Sorting with Asymmetric Read and Write Costs</b> . Guy E. Blelloch ( <i>Carnegie Mellon University</i> ), Jeremy T. Fineman ( <i>Georgetown University</i> ), Phillip B. Gibbons ( <i>Intel Labs and Carnegie Mellon University</i> ), Yan Gu, Julian Shun ( <i>Carnegie Mellon University</i> )	1	
•	<b>Practical Massively Parallel Sorting</b> Michael Axtmann, Timo Bingmann, Peter Sanders, Christian Schulz (Karlsruhe Institute of Technology)	13	
•	<b>A Top-Down Parallel Semisort</b> Yan Gu, Julian Shun, Yihan Sun, Guy E. Blelloch <i>(Carnegie Mellon University)</i>	24	
	ession 2: Caching ssion Chair: Jeremy Fineman (Georgetown University)		
•	Matrix Multiplication I/O-Complexity by Path Routing Jacob Scott, Olga Holtz (University of California, Berkeley), Oded Schwartz (The Hebrew University of Jerusalem)	35	
•	Online Caching with Convex Costs Ishai Menache, Mohit Singh (Microsoft Research)	46	
	eynote Address 1 ssion Chair: Charles Leiserson (Massachusetts Institute of Technology)		
•	Myths and Misconceptions about Threads Hans-J. Boehm (Google)	55	
	rief Announcements ssion Chair: Seth Gilbert <i>(National University of Singapore)</i>		
•	Brief Announcement: New Streaming Algorithms for Parameterized Maximal Matching & Beyond Rajesh Chitnis (Weizmann Institute of Science), Graham Cormode (University of Warwick), Hossein Esfandiari, MohammadTaghi Hajiaghayi (University of Maryland), Morteza Monemizadeh (Charles University)	56	
•	Brief Announcement: Local Computation Algorithms for Graphs of Non-Constant Degrees Reut Levi (École Normale Supérieure & Université Paris Diderot), Ronitt Rubinfeld (Massachusetts Institute of Technology & Tel Aviv University), Anak Yodpinyanee (Massachusetts Institute of Technology)	59	
•	Brief Announcement: Efficient Approximation Algorithms for Computing <i>k</i> Disjoint Restricted Shortest Paths Longkun Guo ( <i>Fuzhou University</i> ), Kewen Liao ( <i>University of Melbourne</i> ), Hong Shen ( <i>University of Adelaide</i> ) Peng Li ( <i>Washington University in St. Louis</i> )		
•	Brief Announcement: Fast and Better Distributed MapReduce Algorithms for k-Center Clustering Sungjin Im (University of California, Merced), Benjamin Moseley (Washington University in St. Louis)	65	
•	Brief Announcement: Fair Adaptive Parallelism for Concurrent Transactional Memory Applications Amin Mohtasham, João Barreto (Universidade de Lisboa)	68	

•	Brief Announcement: Managing Resource Limitation of Best-Effort HTM. Mohamed Mohamedin, Roberto Palmieri, Ahmed Hassan, Binoy Ravindran ( <i>Virginia Tech</i> )	71
•	Brief Announcement: On Scheduling Best-Effort HTM Transactions Mohamed Mohamedin, Roberto Palmieri, Binoy Ravindran (Virginia Tech)	74
•	Brief Announcement: Towards a Universal Approach for the Finite Departure Problem in Overlay Networks	
	Andreas Koutsopoulos, Christian Scheideler, Thim Strothmann (University of Paderborn)	0.0
•	<b>Brief Announcement: MultiQueues – Simple Relaxed Concurrent Priority Queues</b> Hamza Rihani ( <i>Université Grenoble Alpes</i> ), Peter Sanders ( <i>Karlsruhe Institute of Technology</i> ), Roman Dementiev ( <i>Intel GmbH</i> )	80
•	Brief Announcement: A Compiler-Runtime Application Binary Interface for Pipe-While Loops Jim Sukha (Intel Corporation)	83
•	Brief Announcement: Hypergraph Partitioning for Parallel Sparse Matrix-Matrix Multiplication	96
	Grey Ballard (Sandia National Laboratories), Alex Druinsky (Lawrence Berkeley National Laboratory), Nicholas Knight (University of California, Berkeley), Oded Schwartz (Hebrew University)	80
	ession 4: Tools ssion Chair: Michael Spear (Lehigh University)	
•	<b>The Cilkprof Scalability Profiler</b> Tao B. Schardl, Bradley C. Kuszmaul ( <i>Massachusetts Institute of Technology</i> ), I-Ting Angelina Lee ( <i>Washington University in St. Louis</i> ), William M. Leiserson, Charles E. Leiserson ( <i>Massachusetts Institute of Technology</i> )	89
•	Race Detection in Two Dimensions Dimitar Dimitrov, Martin Vechev (ETH Zürich), Vivek Sarkar (Rice University)	. 101
•	Efficiently Detecting Races in Cilk Programs that Use Reducer Hyperobjects I-Ting Angelina Lee ( <i>Washington University in St. Louis</i> ), Tao B. Schardl ( <i>Massachusetts Institute of Technology</i> ),	.111
•	<b>ThreadScan: Automatic and Scalable Memory Reclamation</b> Dan Alistarh ( <i>Microsoft Research</i> ), William M. Leiserson, Alexander Matveev ( <i>Massachusetts Institute of Technology</i> ), Nir Shavit ( <i>Massachusetts Institute of Technology &amp; Tel Aviv University</i> )	. 123
	ession 5: Scheduling ssion Chair: Tao Schardl (Massachusetts Institute of Technology)	
•	<b>Speed Scaling in the Non-Clairvoyant Model</b> Yossi Azar ( <i>Tel Aviv University</i> ), Nikhil R. Devanur ( <i>Microsoft Research</i> ), Zhiyi Huang ( <i>University of Hong Kong</i> ), Debmalya Panigrahi ( <i>Duke University</i> )	.133
•	<b>Cost-Oblivious Reallocation for Scheduling and Planning</b> Michael A. Bender ( <i>Stony Brook University</i> ), Martín Farach-Colton ( <i>Rutgers University</i> ), Sándor P. Fekete ( <i>TU Braunschweig</i> ), Jeremy T. Fineman ( <i>Georgetown University</i> ), Seth Gilbert ( <i>National University of Singapore</i> )	.143
•	<b>Temporal Fairness of Round Robin: Competitive Analysis for Lk-norms of Flow Time</b> Sungjin Im (University of California, Merced), Janardhan Kulkarni (Duke University), Benjamin Moseley (Washington University in St. Louis)	.155
•	Scheduling Non-Unit Jobs to Minimize Calibrations Jeremy T. Fineman, Brendan Sheridan (Georgetown University)	.161
•	Scheduling in Bandwidth Constrained Tree Networks Sungjin Im (University of California, Merced), Benjamin Moseley (Washington University in St. Louis)	.171

Keynote Address 2 Session Chair: Guy Blelloch (Carnegie Mellon University)

•	<b>The Revolution in Graph Theoretic Optimization Problems</b> Gary L. Miller <i>(Carnegie Mellon University)</i>	.181
	ession 6: Graph Algorithms ssion Chair: Pierre Fraigniaud (University of Paris-Sud)	
•	Space and Time Efficient Parallel Graph Decomposition, Clustering, and Diameter Approximation Matteo Ceccarello, Andrea Pietracaprina, Geppino Pucci (University of Padova), Eli Upfal (Brown University)	.182
•	Improved Parallel Algorithms for Spanners and Hopsets	. 192
•	Access to Data and Number of Iterations: Dual Primal Algorithms for Maximum Matching under Resource Constraints Kook Jin Ahn, Sudipto Guha (University of Pennsylvania)	.202
•	Branch-Avoiding Graph Algorithms	.212
	ession 7: Transactional Memory and Concurrent Datastructures ssion Chair: Jim Sukha (Intel)	
•	Seer: Probabilistic Scheduling for Hardware Transactional Memory Nuno Diegues, Paolo Romano, Stoyan Garbatov (Universidade de Lisboa)	.224
•	Conflict Reduction in Hardware Transactions Using Advisory Locks Lingxiang Xiang, Michael L. Scott (University of Rochester)	.234
•	<b>Transactional Acceleration of Concurrent Data Structures</b> Yujie Liu, Tingzhe Zhou, Michael Spear ( <i>Lehigh University</i> )	.244
•	Efficient Memory Management for Lock-Free Data Structures with Optimistic Access Nachshon Cohen, Erez Petrank (Technion Institute of Technology)	.254
	ession 8: Networks, Routing, and Communication ssion Chair: Angelina Lee (Washington University in St. Louis)	
•	Fault Tolerant BFS Structures: A Reinforcement-Backup Tradeoff	.264
•	<b>Distributed Backup Placement in Networks</b> Magnús M. Halldórsson ( <i>Reykjavik University</i> ), Sven Köhler, Boaz Patt-Shamir ( <i>Tel Aviv University</i> ), Dror Rawitz ( <i>Bar Ilan University</i> )	.274
•	Better Deterministic Online Packet Routing on Grids. Guy Even (Tel Aviv University), Moti Medina (Université Paris Diderot), Boaz Patt-Shamir (Tel Aviv University)	
•	Minimizing the Total Weighted Completion Time of Coflows in Datacenter Networks Zhen Qiu, Cliff Stein, Yuan Zhong (Columbia University)	.294
•	Electing a Leader in Wireless Networks Quickly Despite Jamming	.304
	ession 9: Parallel and Distributed Algorithms ssion Chair: Benjamin Moseley (Washington University in St. Louis)	
•	Communication-Efficient Computation on Distributed Noisy Datasets	.313
•	Parallel Computation of Persistent Homology Using the Blowup Complex Ryan Lewis ( <i>Stanford University</i> ), Dmitriy Morozov ( <i>Lawrence Berkeley National Laboratory</i> )	.323

•	Self-Stabilizing Repeated Balls-into-Bins	
	Luca Becchetti ("Sapienza" Università di Roma), Andrea Clementi (Università di Roma "Tor Vergata"),	
	Emanuele Natale ("Sapienza" Università di Roma),	
	Francesco Pasquale (Università di Roma "Tor Vergata"), Gustavo Posta ("Sapienza" Università di Roma)	
•	Randomized Local Network Computing	340
	Laurent Feuilloley (Aalto University), Pierre Fraigniaud (CNRS and University Paris Diderot)	
^	uthor Index	350
~		

## SPAA 2015 Symposium Organization

General Chair:	Guy Blelloch (Carnegie Mellon University, USA)	
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		Euripides Markou	Morteza Zadimoghaddam
Kevin Matulef		Russell Martin	Uri Zwick
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