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Klaus Jansen
José D. P. Rolim
Nikhil R. Devanur
Cristopher Moore
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Contents

Preface ix

Contributed Talks of APPROX

Fully Dynamic All-Pairs Shortest Paths: Breaking the $O(n)$ Barrier
Ittai Abraham, Shiri Chechik, and Kunal Talwar ................................. 1

Approximation Algorithms for Minimum-Load $k$-Facility Location
Sara Ahmadian, Babak Behsaz, Zachary Friggstad, Amin Jorati, Mohammad R. Salavatipour, and Chaitanya Swamy ................................. 17

The Cover Number of a Matrix and its Algorithmic Applications
Noga Alon, Troy Lee, and Adi Shraibman ........................................ 34

Network Design with Coverage Costs
Siddharth Barman, Shuchi Chawla, and Seeun Umboh ............................ 48

Online Set Cover with Set Requests
Kshipra Bhawalkar, Sreenivas Gollapudi, and Debmalya Panigrahi .............. 64

Lowest Degree $k$-Spanner: Approximation and Hardness
Eden Chlamtác and Michael Dinitz ................................................... 80

Improved Streaming Algorithms for Weighted Matching, via Unweighted Matching
Michael Crouch and Daniel M. Stubbs .............................................. 96

Guruswami-Sinop Rounding without Higher Level Lasserre
Amit Deshpande and Rakesh Venkat .................................................. 105

Improved Approximation Algorithm for Steiner $k$-Forest with Nearly Uniform Weights
Michael Dinitz, Guy Kortsarz, and Zeev Nutov ................................. 115

Computing Opaque Interior Barriers à la Shermer
Adrian Dumitrescu, Minghui Jiang, and Csaba D. Tóth ........................ 128

Hardness of Submodular Cost Allocation: Lattice Matching and a Simplex Coloring Conjecture
Alina Ene and Jan Vondrák ............................................................. 144

Constrained Monotone Function Maximization and the Supermodular Degree
Moran Feldman and Rani Izsak ....................................................... 160

On the Equivalence of the Bidirected and Hypergraphic Relaxations for Steiner Tree
Andreas Emil Feldmann, Jochen Könemann, Neil Olver, and Laura Sanità ...... 176

Reaching Consensus via non-Bayesian Asynchronous Learning in Social Networks
Michal Feldman, Nicole Immorlica, Brendan Lucier, and S. Matthew Weinberg ... 192

Deliver or Hold: Approximation Algorithms for the Periodic Inventory Routing Problem
Takuro Fukunaga, Afshin Nikzad, and R. Ravi ..................................... 209

Complexity and Approximation of the Continuous Network Design Problem
Martin Gairing, Tobias Harks, and Max Klimm .................................. 226
## Contents

Approximate Pure Nash Equilibria in Weighted Congestion Games  
*Christoph Hansknecht, Max Klimm, and Alexander Skopalik* ................. 242

Discrepancy Without Partial Colorings  
*Nicholas J. A. Harvey, Roy Schwartz, and Mohit Singh* ......................... 258

Universal Factor Graphs for Every NP-Hard Boolean CSP  
*Shlomo Jozeph* ................................................................................. 274

A 9/7-Approximation Algorithm for Graphic TSP in Cubic Bipartite Graphs  
*Jeremy A. Karp and R. Ravi* ............................................................. 284

Sherali-Adams Gaps, Flow-Cover Inequalities and Generalized Configurations for Capacity-Constrained Facility Location  
*Stavros G. Kolliopoulos and Yannis Moysoglou* .................................... 297

Lower Bounds on Expansion of Graph Powers  
*Tsz Chiu Kwok and Lap Chi Lau* ....................................................... 313

An Improved Approximation Algorithm for the Hard Uniform Capacitated $k$-median Problem  
*Shanfei Li* ....................................................................................... 325

Approximation Algorithms for Hypergraph Small Set Expansion and Small Set Vertex Expansion  
*Anand Louis and Yury Makarychev* .................................................... 339

Robust Appointment Scheduling  
*Shashi Mittal, Andreas S. Schulz, and Sebastian Stiller* ......................... 356

Computational Complexity of Certifying Restricted Isometry Property  
*Abhiram Natarajan and Yi Wu* ........................................................... 371

Gap Amplification for Small-Set Expansion via Random Walks  
*Prasad Raghavendra and Tselil Schramm* ............................................ 381

Power of Preemption on Uniform Parallel Machines  
*Alan J. Soper and Vitaly A. Strusevich* ............................................... 392

Improved Approximation Algorithms for Matroid and Knapsack Median Problems and Applications  
*Chaitanya Swamy* ............................................................................ 403

Robust Approximation of Temporal CSP  
*Suguru Tamaki and Yūichi Yoshida* .................................................... 419

Parity is Positively Useless  
*Cenny Wenner* .................................................................................. 433

**Contributed Talks of RANDOM**

The Condensation Phase Transition in Random Graph Coloring  
*Victor Bapst, Amin Coja-Oghlan, Samuel Hetterich, Felicia Raßmann, and Dan Vilenchik* .................................................... 449
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Decoding Group Homomorphisms between Supersolvable Groups</td>
<td>Alan Guo and Madhu Sudan</td>
<td>737</td>
</tr>
<tr>
<td>Evading Subspaces over Large Fields and Explicit List-Decodable Rank-Metric Codes</td>
<td>Venkatesan Garuswami and Carol Wang</td>
<td>748</td>
</tr>
<tr>
<td>Exchangeability and Realizability: De Finetti Theorems on Graphs</td>
<td>T.S. Jayram and Jan Vondrák</td>
<td>762</td>
</tr>
<tr>
<td>Global and Local Information in Clustering Labeled Block Models</td>
<td>Varun Kanade, Elchanan Mossel, and Tselil Schramm</td>
<td>779</td>
</tr>
<tr>
<td>Embedding Hard Learning Problems into Gaussian Space</td>
<td>Adam Klivans and Pravesh Kothari</td>
<td>793</td>
</tr>
<tr>
<td>Smoothed Analysis on Connected Graphs</td>
<td>Michael Krivelevich, Daniel Reichman, and Wojciech Samotij</td>
<td>810</td>
</tr>
<tr>
<td>Local Algorithms for Sparse Spanning Graphs</td>
<td>Reut Levi, Dana Ron, and Ronitt Rubinfeld</td>
<td>826</td>
</tr>
<tr>
<td>The Complexity of Ferromagnetic Two-spin Systems with External Fields</td>
<td>Jingcheng Liu, Pinyan Lu, and Chihao Zhang</td>
<td>843</td>
</tr>
<tr>
<td>It’s a Small World for Random Surfers</td>
<td>Abbas Mehrabian and Nick Wormal</td>
<td>857</td>
</tr>
<tr>
<td>Deterministic Coupon Collection and Better Strong Dispersers</td>
<td>Raghu Meka, Omer Reingold, and Yuan Zhou</td>
<td>872</td>
</tr>
<tr>
<td>Pseudorandomness and Fourier Growth Bounds for Width 3 Branching Programs</td>
<td>Thomas Steinke, Salil Vadhan, and Andrew Wan</td>
<td>885</td>
</tr>
</tbody>
</table>
Preface

This volume contains the papers presented at the 17th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2014) and the 18th International Workshop on Randomization and Computation (RANDOM 2014), which took place concurrently in Universitat Politècnica de Catalunya Barcelona, Spain, during September 4–6, 2014.


Topics of interest for APPROX and RANDOM are: design and analysis of approximation algorithms, hardness of approximation, small space algorithms, sub-linear time algorithms, streaming algorithms, embeddings and metric geometry, mathematical programming methods, combinatorial problems in graphs and networks, game theory, markets and economic applications, geometric problems, packing, covering, scheduling, approximate learning, design and analysis of online algorithms, design and analysis of randomized algorithms, randomized complexity theory, pseudorandomness and derandomization, random combinatorial structures, random walks/Markov chains, expander graphs and randomness extractors, probabilistic proof systems, random projections and embeddings, error-correcting codes, average-case analysis, property testing, phase transitions, computational learning theory, and other applications of approximation and randomness.

The volume contains 31 contributed papers, selected by the APPROX Program Committee out of 64 submissions, and 30 contributed papers, selected by the RANDOM Program Committee out of 62 submissions.

We would like to thank all of the authors who submitted papers, the invited speakers, the members of the Program Committees, and the external reviewers. We gratefully acknowledge the support from the Microsoft Research, USA, the Institute of Computer Science of the Christian-Albrechts-Universität zu Kiel, the Santa Fe Institute, USA, and the Department of Computer Science of the University of Geneva.

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Nikhil R. Devanur
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Ranganath Kondapally
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Tsz Chiu Kwok
<table>
<thead>
<tr>
<th>Authors</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silvio Lattanzi</td>
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<td>Mohammad R. Salavatipour</td>
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<td>Alan J. Soper</td>
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<td>Yury Makarychev</td>
<td>Daniel Štefanković</td>
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<td>Abbas Mehrabian</td>
<td>Thomas Steinke</td>
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<td>Vitaly A. Strusevich</td>
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<td>Madhu Sudan</td>
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<td>Suguru Tamaki</td>
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<td>Afschin Nikzad</td>
<td>Kunal Talwar</td>
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<td>Will Perkins</td>
<td>Carol Wang</td>
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<tr>
<td>Diana Piguet</td>
<td>Thomas Watson</td>
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<td>Sebastian Pokutta</td>
<td>S. Matthew Weinberg</td>
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<td>Felícia Raffmann</td>
<td>Grigory Yaroslavtsev</td>
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<td>Yuichi Yoshida</td>
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<td>Yuan Zhou</td>
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