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Preface

This volume contains the 69 papers presented at the 16th Annual European Symposium on Algorithms (ESA 2010), held in Liverpool during September 6–8, 2010, including three papers by the distinguished invited speakers Artur Czumaj, Herbert Edelsbrunner, and Paolo Ferragina. ESA 2010 was organized as a part of ALGO 2010, which also included the 10th Workshop on Algorithms in Bioinformatics (WABI), the 8th Workshop on Approximation and Online Algorithms (WAOA), and the 10th Workshop on Algorithmic Approaches for Transportation Modeling, Optimization, and Systems (ATMOS).

The European Symposium on Algorithms covers research in the design, use, and analysis of efficient algorithms and data structures. As in previous years, the symposium had two tracks: the *Design and Analysis Track* and the *Engineering and Applications Track*, each with its own Program Committee. In total 245 papers adhering to the submission guidelines were submitted. Each paper was reviewed by three or four referees. Based on the reviews and the often extensive electronic discussions following them, the committees selected 66 papers in total: 56 (out of 206) to the Design and Analysis Track and 10 (out of 39) to the Engineering and Applications track. We believe that these papers together made up a strong and varied program, showing the depth and breadth of current algorithms research.

Three papers deserve special mentioning: the papers “When LP Is the Cure for Your Matching Woes: Improved Bounds for Stochastic Matchings” by N. Bansal, A. Gupta, J. Li, J. Mestre, V. Nagarajan and A. Rudra and “Feasibility Analysis of Sporadic Real-Time Multiprocessor Task Systems” by V. Bonifaci and A. Marchetti-Spaccamela, which won the award for the best paper, and the paper “Shortest Paths in Planar Graphs with Real Lengths in $O(n \log^2 n / \log \log n)$ Time” by S. Mozes and C. Wulff-Nilsen, which won the award for the best student paper. We congratulate the authors on this success.

ESA 2010 was sponsored by the European Association of Theoretical Computer Science, the International Society of Computational Geometry, the London Mathematical Society, Springer, and the University of Liverpool. Besides the sponsors, we also wish to thank the people from the EasyChair Conference System; using their wonderful system saved us an enormous amount of work during the whole process. Finally, we thank all authors who submitted their work to ESA 2010, all Program Committee members for their hard work, and all reviewers who helped the Program Committees in evaluating the submitted papers, and we hope the readers will find the papers in these proceedings instructive and enjoyable.

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Table of Contents – Part I

Invited Talk

The Robustness of Level Sets	1
<i>Paul Bendich, Herbert Edelsbrunner, Dmitriy Morozov, and Amit Patel</i>	

Session 1a

Solving an Avionics Real-Time Scheduling Problem by Advanced IP-Methods	11
<i>Friedrich Eisenbrand, Karthikeyan Kesavan, Raju S. Mattikalli, Martin Niemeier, Arnold W. Nordsieck, Martin Skutella, José Verschae, and Andreas Wiese</i>	
Non-clairvoyant Speed Scaling for Weighted Flow Time	23
<i>Sze-Hang Chan, Tak-Wah Lam, and Lap-Kei Lee</i>	
A Robust PTAS for Machine Covering and Packing	36
<i>Martin Skutella and José Verschae</i>	

Session 1b

Balancing Degree, Diameter and Weight in Euclidean Spanners	48
<i>Shay Solomon and Michael Elkin</i>	
Testing Euclidean Spanners	60
<i>Frank Hellweg, Melanie Schmidt, and Christian Sohler</i>	
Fast Approximation in Subspaces by Doubling Metric Decomposition . . .	72
<i>Marek Cygan, Lukasz Kowalik, Marcin Mucha, Marcin Pilipczuk, and Piotr Sankowski</i>	
f -Sensitivity Distance Oracles and Routing Schemes	84
<i>Shiri Chechik, Michael Langberg, David Peleg, and Liam Roditty</i>	

Session 2a

Fast Minor Testing in Planar Graphs	97
<i>Isolde Adler, Frederic Dorn, Fedor V. Fomin, Ignasi Sau, and Dimitrios M. Thilikos</i>	
On the Number of Spanning Trees a Planar Graph Can Have	110
<i>Kevin Buchin and André Schulz</i>	

Contractions of Planar Graphs in Polynomial Time.....	122
<i>Marcin Kamiński, Daniël Paulusma, and Dimitrios M. Thilikos</i>	

Session 2b

Communication Complexity of Quasirandom Rumor Spreading	134
<i>Petra Berenbrink, Robert Elsässer, and Thomas Sauerwald</i>	
A Complete Characterization of Group-Strategyproof Mechanisms of Cost-Sharing	146
<i>Emmanouil Pountourakis and Angelina Vidali</i>	
Contribution Games in Social Networks.....	158
<i>Elliot Anshelevich and Martin Hoefer</i>	

Session 3a

Improved Bounds for Online Stochastic Matching	170
<i>Bahman Bahmani and Michael Kapralov</i>	
Online Stochastic Packing Applied to Display Ad Allocation.....	182
<i>Jon Feldman, Monika Henzinger, Nitish Korula, Vahab S. Mirrokni, and Cliff Stein</i>	
Caching Is Hard – Even in the Fault Model	195
<i>Marek Chrobak, Gerhard J. Woeginger, Kazuhisa Makino, and Haifeng Xu</i>	

Session 3b

Superselectors: Efficient Constructions and Applications	207
<i>Ferdinando Cicalese and Ugo Vaccaro</i>	
Estimating the Average of a Lipschitz-Continuous Function from One Sample	219
<i>Abhimanyu Das and David Kempe</i>	
Streaming Graph Computations with a Helpful Advisor.....	231
<i>Graham Cormode, Michael Mitzenmacher, and Justin Thaler</i>	

Session 4a

Algorithms for Dominating Set in Disk Graphs: Breaking the $\log n$ Barrier	243
<i>Matt Gibson and Imran A. Pirwani</i>	
Minimum Vertex Cover in Rectangle Graphs	255
<i>Reuven Bar-Yehuda, Danny Hermelin, and Dror Rawitz</i>	

Feedback Vertex Sets in Tournaments	267
<i>Serge Gaspers and Matthias Mnich</i>	

Session 4b

n -Level Graph Partitioning.....	278
<i>Vitaly Osipov and Peter Sanders</i>	
Fast Routing in Very Large Public Transportation Networks Using Transfer Patterns	290
<i>Hannah Bast, Erik Carlsson, Arno Eigenwillig, Robert Geisberger, Chris Harrelson, Veselin Raychev, and Fabien Viger</i>	
Finding the Diameter in Real-World Graphs: Experimentally Turning a Lower Bound into an Upper Bound	302
<i>Pierluigi Crescenzi, Roberto Grossi, Claudio Imbrenda, Leonardo LANZI, and Andrea Marino</i>	

Session 5a

Budgeted Red-Blue Median and Its Generalizations	314
<i>MohammadTaghi Hajiaghayi, Rohit Khandekar, and Guy Kortsarz</i>	
All Ternary Permutation Constraint Satisfaction Problems Parameterized above Average Have Kernels with Quadratic Numbers of Variables	326
<i>Gregory Gutin, Leo van Iersel, Matthias Mnich, and Anders Yeo</i>	
Strong Formulations for the Multi-module PESP and a Quadratic Algorithm for Graphical Diophantine Equation Systems.....	338
<i>Laura Galli and Sebastian Stiller</i>	
Robust Algorithms for Sorting Railway Cars	350
<i>Christina Büsing and Jens Maue</i>	

Session 5b

Cloning Voronoi Diagrams via Retroactive Data Structures.....	362
<i>Matthew T. Dickerson, David Eppstein, and Michael T. Goodrich</i>	
A Unified Approach to Approximate Proximity Searching	374
<i>Sunil Arya, Guilherme D. da Fonseca, and David M. Mount</i>	
Spatio-temporal Range Searching over Compressed Kinetic Sensor Data	386
<i>Sorelle A. Friedler and David M. Mount</i>	

Constructing the Exact Voronoi Diagram of Arbitrary Lines in Three-Dimensional Space: with Fast Point-Location	398
<i>Michael Hemmer, Ophir Setter, and Dan Halperin</i>	

Invited Talk

Local Graph Exploration and Fast Property Testing	410
<i>Artur Czumaj</i>	

Session 6a

A Fully Compressed Algorithm for Computing the Edit Distance of Run-Length Encoded Strings	415
<i>Kuan-Yu Chen and Kun-Mao Chao</i>	
Fast Prefix Search in Little Space, with Applications	427
<i>Djamal Belazzougui, Paolo Boldi, Rasmus Pagh, and Sebastiano Vigna</i>	
On the Huffman and Alphabetic Tree Problem with General Cost Functions	439
<i>Hiroshi Fujiwara and Tobias Jacobs</i>	
Medium-Space Algorithms for Inverse BWT	451
<i>Juha Kärkkäinen and Simon J. Puglisi</i>	

Session 6b

Median Trajectories	463
<i>Kevin Buchin, Maïke Buchin, Marc van Kreveld, Maarten Löffler, Rodrigo I. Silveira, Carola Wenk, and Lionov Wiratma</i>	
Optimal Cover of Points by Disks in a Simple Polygon	475
<i>Haim Kaplan, Matthew J. Katz, Gila Morgenstern, and Micha Sharir</i>	
Stability of ε -Kernels	487
<i>Pankaj K. Agarwal, Jeff M. Phillips, and Hai Yu</i>	
The Geodesic Diameter of Polygonal Domains	500
<i>Sang Won Bae, Matias Korman, and Yoshio Okamoto</i>	

Session 7a

Polyhedral and Algorithmic Properties of Quantified Linear Programs	512
<i>Ulf Lorenz, Alexander Martin, and Jan Wolf</i>	

Approximating Parameterized Convex Optimization Problems	524
<i>Joachim Giesen, Martin Jaggi, and Sören Laue</i>	
Approximation Schemes for Multi-Budgeted Independence Systems	536
<i>Fabrizio Grandoni and Rico Zenklusen</i>	

Session 7b

Algorithmic Meta-theorems for Restrictions of Treewidth	549
<i>Michael Lampis</i>	
Determining Edge Expansion and Other Connectivity Measures of Graphs of Bounded Genus	561
<i>Viresh Patel</i>	
Constructing the R^* Consensus Tree of Two Trees in Subcubic Time . . .	573
<i>Jesper Jansson and Wing-Kin Sung</i>	
Author Index	585

Table of Contents – Part II

Invited Talk

Data Structures: Time, I/Os, Entropy, Joules!	1
<i>Paolo Ferragina</i>	

Session 8a

Weighted Congestion Games: Price of Anarchy, Universal Worst-Case Examples, and Tightness	17
<i>Kshipra Bhawalkar, Martin Gairing, and Tim Roughgarden</i>	
Computing Pure Nash and Strong Equilibria in Bottleneck Congestion Games	29
<i>Tobias Harks, Martin Hoefer, Max Klimm, and Alexander Skopalik</i>	
Combinatorial Auctions with Verification Are Tractable	39
<i>Piotr Krysta and Carmine Ventre</i>	
How to Allocate Goods in an Online Market?	51
<i>Yossi Azar, Niv Buchbinder, and Kamal Jain</i>	

Session 8b

Fréchet Distance of Surfaces: Some Simple Hard Cases	63
<i>Kevin Buchin, Maïke Buchin, and André Schulz</i>	
Geometric Algorithms for Private-Cache Chip Multiprocessors	75
<i>Deepak Ajwani, Nodari Sitchinava, and Norbert Zeh</i>	
Volume in General Metric Spaces	87
<i>Ittai Abraham, Yair Bartal, Ofer Neiman, and Leonard J. Schulman</i>	
Shortest Cut Graph of a Surface with Prescribed Vertex Set	100
<i>Éric Colin de Verdière</i>	

Session 9a

Induced Matchings in Subcubic Planar Graphs	112
<i>Ross J. Kang, Matthias Mnich, and Tobias Müller</i>	
Robust Matchings and Matroid Intersections	123
<i>Ryo Fujita, Yusuke Kobayashi, and Kazuhisa Makino</i>	

A 25/17-Approximation Algorithm for the Stable Marriage Problem with One-Sided Ties	135
<i>Kazuo Iwama, Shuichi Miyazaki, and Hiroki Yanagisawa</i>	

Strongly Stable Assignment	147
<i>Ning Chen and Arpita Ghosh</i>	

Session 9b

Data Structures for Storing Small Sets in the Bitprobe Model	159
<i>Jaikumar Radhakrishnan, Smit Shah, and Saswata Shannigrahi</i>	

On Space Efficient Two Dimensional Range Minimum Data Structures	171
<i>Gerth Stølting Brodal, Pooya Davoodi, and S. Srinivasa Rao</i>	

Pairing Heaps with Costless Meld	183
<i>Amr Elmasry</i>	

Top- k Ranked Document Search in General Text Databases	194
<i>J. Shane Culpepper, Gonzalo Navarro, Simon J. Puglisi, and Andrew Turpin</i>	

Best-Paper Session

Shortest Paths in Planar Graphs with Real Lengths in $O(n \log^2 n / \log \log n)$ Time	206
<i>Shay Mozes and Christian Wulff-Nilsen</i>	

When LP Is the Cure for Your Matching Woes: Improved Bounds for Stochastic Matchings	218
<i>Nikhil Bansal, Anupam Gupta, Jian Li, Julián Mestre, Viswanath Nagarajan, and Atri Rudra</i>	

Feasibility Analysis of Sporadic Real-Time Multiprocessor Task Systems	230
<i>Vincenzo Bonifaci and Alberto Marchetti-Spaccamela</i>	

Author Index	243
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