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Approximation, Randomization and Combinatorial Optimization

Algorithms and Techniques

9th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems, APPROX 2006 and 10th International Workshop on Randomization and Computation, RANDOM 2006
Barcelona, Spain, August 28-30 2006
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Preface

This volume contains the papers presented at the 9th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2006) and the 10th International Workshop on Randomization and Computation (RANDOM 2006), which took place concurrently at the Universitat Politècnica de Catalunya, on August 28–30, 2006. APPROX focuses on algorithmic and complexity issues surrounding the development of efficient approximate solutions to computationally hard problems, and was the ninth in the series after Aalborg (1998), Berkeley (1999), Saarbrücken (2000), Berkeley (2001), Rome (2002), Princeton (2003), Cambridge (2004), and Berkeley (2005). RANDOM is concerned with applications of randomness to computational and combinatorial problems, and was the tenth workshop in the series following Bologna (1997), Barcelona (1998), Berkeley (1999), Geneva (2000), Berkeley (2001), Harvard (2002), Princeton (2003), Cambridge (2004), and Berkeley (2005).

Topics of interest for APPROX and RANDOM are: design and analysis of approximation algorithms, hardness of approximation, small space and data streaming algorithms, sub-linear time algorithms, embeddings and metric space methods, mathematical programming methods, coloring and partitioning, cuts and connectivity, geometric problems, game theory and applications, network design and routing, packing and covering, scheduling, 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, computational learning theory, and other applications of approximation and randomness.

The volume contains 2 papers as invited lectures, 22 contributed papers, selected by the APPROX Program Committee out of 56 submissions, and 22 contributed papers, selected by the RANDOM Program Committee out of 49 submissions.

We would like to thank all of the authors who submitted papers, the members of the Program Committees:

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August 2006

Uri Zwick and Josep Díaz, Program Chairs
Klaus Jansen and José D. P. Rolim, Workshop Chairs

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