

1. Record Nr.	UNINA9910484749503321
Titolo	Approximation, Randomization, and Combinatorial Optimization. Algorithms and Techniques : 13th International Workshop, APPROX 2010, and 14th International Workshop, RANDOM 2010, Barcelona, Spain, September 1-3, 2010. Proceedings / / edited by Maria Serna, Ronen Shaltiel, Klaus Jansen, José Rolim
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	1-280-38852-8 9786613566447 3-642-15369-0
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (XIII, 782 p. 54 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6302
Altri autori (Persone)	SernaMaria <1959->
Disciplina	005.1
Soggetti	Computer programming Computer networks Computer science Algorithms Computer science - Mathematics Discrete mathematics Artificial intelligence - Data processing Programming Techniques Computer Communication Networks Theory of Computation Discrete Mathematics in Computer Science Data Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contributed Talks of APPROX -- Approximation Algorithms for the Bottleneck Asymmetric Traveling Salesman Problem -- Improved Inapproximability for Submodular Maximization -- Approximation Algorithms for the Directed k-Tour and k-Stroll Problems -- Submodular Secretary Problem and Extensions -- Approximation

Algorithms for Min-Max Generalization Problems -- Min-Power Strong Connectivity -- The Complexity of Approximately Counting Stable Matchings -- Constant Approximation Algorithms for Embedding Graph Metrics into Trees and Outerplanar Graphs -- Approximating Linear Threshold Predicates -- Approximating Sparsest Cut in Graphs of Bounded Treewidth -- On the Conditional Hardness of Coloring a 4-Colorable Graph with Super-Constant Number of Colors -- Vertex Sparsifiers: New Results from Old Techniques -- PTAS for Weighted Set Cover on Unit Squares -- Improved Lower Bounds for the Universal and a priori TSP -- Proximity Algorithms for Nearly-Doubling Spaces -- Matrix Sparsification and the Sparse Null Space Problem -- The Checkpoint Problem -- The Euclidean Distortion of Flat Tori -- Online Embeddings -- Approximation Algorithms for Intersection Graphs -- An $O(\log n)$ -Approximation Algorithm for the Disjoint Paths Problem in Eulerian Planar Graphs and 4-Edge-Connected Planar Graphs -- Improved Algorithm for the Half-Disjoint Paths Problem -- Approximate Lasserre Integrality Gap for Unique Games -- Exploiting Concavity in Bimatrix Games: New Polynomially Tractable Subclasses -- Maximum Flows on Disjoint Paths -- Approximation Algorithms for Reliable Stochastic Combinatorial Optimization -- How to Schedule When You Have to Buy Your Energy -- Improving Integrality Gaps via Chvátal-Gomory Rounding -- Contributed Talks of RANDOM -- Uniform Derandomization from Pathetic Lower Bounds -- Testing Boolean Functions Isomorphism -- Better Size Estimation for Sparse Matrix Products -- Low Rate Is Insufficient for Local Testability -- Reconstruction Threshold for the Hardcore Model -- Lower Bounds for Local Monotonicity Reconstruction from Transitive-Closure Spanners -- Monotonicity Testing and Shortest-Path Routing on the Cube -- Better Gap-Hamming Lower Bounds via Better Round Elimination -- Propagation Connectivity of Random Hypergraphs -- Improved Pseudorandom Generators for Depth 2 Circuits -- The Structure of Winning Strategies in Parallel Repetition Games -- Distribution-Free Testing Algorithms for Monomials with a Sublinear Number of Queries -- Periodicity in Streams -- Rumor Spreading on Random Regular Graphs and Expanders -- On Testing Computability by Small Width OBDDs -- Learning and Lower Bounds for AC 0 with Threshold Gates -- Liftings of Tree-Structured Markov Chains -- Constructive Proofs of Concentration Bounds -- Almost-Euclidean Subspaces of via Tensor Products: A Simple Approach to Randomness Reduction -- Testing Outerplanarity of Bounded Degree Graphs -- Two-Source Extractors Secure against Quantum Adversaries -- Locally Testable vs. Locally Decodable Codes -- Differential Privacy and the Fat-Shattering Dimension of Linear Queries -- Two Theorems on List Decoding -- Delaying Satisfiability for Random 2SAT -- Improved Rounding for Parallel Repeated Unique Games -- A Query Efficient Non-adaptive Long Code Test with Perfect Completeness -- Relativized Worlds without Worst-Case to Average-Case Reductions for NP -- A Quadratic Lower Bound for Three-Query Linear Locally Decodable Codes over Any Field.

Sommario/riassunto

This volume contains the papers presented at the 13th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2010) and the 14th International Workshop on Randomization and Computation (RANDOM 2010), which took place concurrently in Universitat Politècnica de Catalunya (UPC) Barcelona, Spain, during September 1-3, 2010. APPROX focuses on algorithmic and complexity issues surrounding the development of efficient approximate solutions to computationally difficult problems, and was the 13th in the series after Aalborg (1998), Berkeley (1999), Sa-

brucken (2000), Berkeley (2001), Rome (2002), Princeton (2003), Cambridge (2004), Berkeley (2005), Barcelona (2006), Princeton (2007), Boston (2008) and Berkeley (2009). RANDOM is concerned with applications of randomness to computational and combinatorial problems, and was the 14th workshop in the series following Bologna (1997), Barcelona (1998), Berkeley (1999), Geneva (2000), Berkeley (2001), Harvard (2002), Princeton (2003), Cambridge (2004), Berkeley (2005), Barcelona (2006), Princeton (2007), Boston (2008), and Berkeley (2009).
