1. Record Nr.   UNINA9910143898803321

   Titolo   Randomization and Approximation Techniques in Computer Science :
                        6th International Workshop, RANDOM 2002, Cambridge, MA, USA,
                        September 13-15, 2002, Proceedings / / edited by Jose D.P. Rolim, Salil
                        Vadhan

   Pubbl/distr/stampa   Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer,
                        , 2002

   ISBN   3-540-45726-7

   Edizione   [1st ed. 2002.]

   Descrizione fisica   1 online resource (VIII, 284 p.)

   Collana   Lecture Notes in Computer Science, , 0302-9743 ; ; 2483

   Disciplina   004/.07/27

   Soggetti   Computer programming
                        Computer science—Mathematics
                        Algorithms
                        Numerical analysis
                        Programming Techniques
                        Mathematics of Computing
                        Algorithm Analysis and Problem Complexity
                        Numeric Computing
                        Discrete Mathematics in Computer 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   Counting Distinct Elements in a Data Stream -- On Testing Convexity
                        and Submodularity -- ?-Regular Languages Are Testable with a
                        Constant Number of Queries -- Optimal Lower Bounds for 2-Query
                        Locally Decodable Linear Codes -- Counting and Sampling H-
                        Colourings -- Rapidly Mixing Markov Chains for Dismantleable
                        Constraint Graphs -- On the 2-Colorability of Random Hypergraphs --
                        Percolation on Finite Cayley Graphs -- Computing Graph Properties by
                        Randomized Subcube Partitions -- Bisection of Random Cubic Graphs
                        -- Small k-Dominating Sets of Regular Graphs -- Finding Sparse
                        Induced Subgraphs of Semirandom Graphs -- Mixing in Time and
                        Space for Lattice Spin Systems: A Combinatorial View -- Quantum
                        Walks on the Hypercube -- Randomness-Optimal Characterization of

Two NP Proof Systems -- A Probabilistic-Time Hierarchy Theorem for "Slightly Non-uniform" Algorithms -- Derandomization That Is Rarely Wrong from Short Advice That Is Typically Good -- Is Constraint Satisfaction Over Two Variables Always Easy? -- Dimensionality Reductions That Preserve Volumes and Distance to Affine Spaces, and Their Algorithmic Applications -- On the Eigenvalue Power Law -- Classifying Special Interest Groups in Web Graphs.

| Sommario/riassunto | This volume contains the papers presented at the 6th International Workshop on Randomization and Approximation Techniques in Computer Science (RAN- DOM 2002), which took place at Harvard University, Cambridge, Massachusetts, from September 13-15, 2002. RANDOM 2002 was concerned with applications of randomness to computational and combinatorial problems, and was the sixth workshop in the series following Bologna, Barcelona, Berkeley, Geneva, and B- keley again. The volume contains 21 contributed papers, selected by the program c- mittee from 48 submissions received in response to the call for papers. We thank all of the authors who submitted papers, our invited speakers, the members of the program committee: Dimitris Achlioptas, Microsoft Research Martin Dyer, U. of Leeds Uriel Feige, Weizmann Institute Russell Impagliazzo, UC San Diego Sampath Kannan, U. of Pennsylvania David Karger, MIT Nati Linial, Hebrew U. Rafail Ostrovsky, Telcordia Technologies Paul Spirakis, U. of Patras and CTI Angelika Steger, TU Munich R¨udiger Urbanke, Swiss Federal Inst. of Tech. Salil Vadhan, Harvard U., chair, and the external reviewers: N. Alon, R. Alur, A. Ambainis, T. Batu, J. Feig- baum, S. Gerke, Y. Gertner, A. Goerdt, L. Goldberg, J. Hastad, C. Iliopoulos, Y. Ishai, V. Kabanets, S. Khot, L. Kirousis, S. Kontogiannis, M. Krivelevich, M. Mavronicolas, A. McGregor, F. McSherry, D. van Melkebeek, M. Molloy, E. Mossel, S. Nikoletseas, R. Raz, D. Ron, P. Tetali, L. Trevisan, E. Vigoda, J. Watrous, and P. Winkler. |