1.

Record Nr.	UNINA9910483600103321
Titolo	LATIN 2010: Theoretical Informatics : 9th Latin American Symposium, Oaxaca, Mexico, April 19-23, 2010, Proceedings / / edited by Alejandro López-Ortiz
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	3-642-12200-0
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (XV, 706 p. 143 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6034
Altri autori (Persone)	Lopez-OrtizAlejandro
Disciplina	005.11
Soggetti	Computer programming Computer networks Computer science Algorithms Artificial intelligence Computer science - Mathematics Discrete mathematics Programming Techniques Computer Communication Networks Theory of Computation Artificial Intelligence 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	Continuous and Discrete Methods in Computer Science -- Colorful Strips -- The Mono- and Bichromatic Empty Rectangle and Square Problems in All Dimensions -- Connectivity Is Not a Limit for Kernelization: Planar Connected Dominating Set -- Randomized Truthful Algorithms for Scheduling Selfish Tasks on Parallel Machines -- Almost Linear Time Computation of the Chromatic Polynomial of a Graph of Bounded Tree-Width -- Average Parameterization and Partial Kernelization for Computing Medians -- Sharp Separation and Applications to Exact and Parameterized Algorithms -- Finding the

Minimum-Distance Schedule for a Boundary Searcher with a Flashlight -- The Language Theory of Bounded Context-Switching -- Local Search Performance Guarantees for Restricted Related Parallel Machine Scheduling -- Packet Routing on the Grid -- Faithful Representations of Graphs by Islands in the Extended Grid -- The I/O Complexity of Sparse Matrix Dense Matrix Multiplication -- Sparse Recovery Using Sparse Random Matrices -- Optimal Succinctness for Range Minimum Queries -- Compact Rich-Functional Binary Relation Representations -- Radix Cross-Sections for Length Morphisms -- Pairs of Complementary Unary Languages with "Balanced" Nondeterministic Automata -- Quotient Complexity of Ideal Languages -- Complexity of Operations on Cofinite Languages -- Fast Set Intersection and Two-Patterns Matching -- Counting Reducible, Powerful, and Relatively Irreducible Multivariate Polynomials over Finite Fields -- A Larger Lower Bound on the OBDD Complexity of the Most Significant Bit of Multiplication -- Modelling the LLL Algorithm by Sandpiles -- Communication-Efficient Construction of the Plane Localized Delaunay Graph -- Time Complexity of Distributed Topological Self-stabilization: The Case of Graph Linearization -- RandomisedBroadcasting: Memory vs. Randomness -- Limit Theorems for Random MAX-2-XORSAT -- On Quadratic Threshold CSPs -- Finding Lower Bounds on the Complexity of Secret Sharing Schemes by Linear Programming -- Finding the Best CAFE Is NP-Hard -- The Size and Depth of Layered Boolean Circuits -- Lipschitz Unimodal and Isotonic Regression on Paths and Trees -- Ambiguity and Deficiency in Costas Arrays and APN Permutations -- Iterated Shared Memory Models -- Optimal Polygonal Representation of Planar Graphs -- Minimum-Perimeter Intersecting Polygons -- Finding the Smallest Gap between Sums of Square Roots -- Matching Points with Things -- Homotopic Rectilinear Routing with Few Links and Thick Edges -- Tilings Robust to Errors -- Visiting a Sequence of Points with a Bevel-Tip Needle -- Euclidean Prize-Collecting Steiner Forest -- Prize-Collecting Steiner Networks via Iterative Rounding -- Kernelization through Tidying -- Gradual Sub-lattice Reduction and a New Complexity for Factoring Polynomials -- The Power of Fair Pricing Mechanisms -- Quasi-Proportional Mechanisms: Prior-Free Revenue Maximization -- Some Observations on Holographic Algorithms -- The Interval Constrained 3-Coloring Problem -- Counting Hexagonal Patches and Independent Sets in Circle Graphs -- Approximating Maximum Diameter-Bounded Subgraphs -- Largest Induced Acyclic Tournament in Random Digraphs: A 2-Point Concentration -- The Complexity of Counting Eulerian Tours in 4-Regular Graphs -- Efficient Edge Domination on Hole-Free Graphs in Polynomial Time -- Computational Complexity of the Hamiltonian Cycle Problem in Dense Hypergraphs -- Rank Selection in Multidimensional Data -- Layered Working-Set Trees -- Lightweight Data Indexing and Compression in External Memory.

Sommario/riassunto

The papers contained in this volume were presented at the 9th Latin American TheoreticalInformaticsSymposiumheldattheBenitoJu´arezUniversityofO- aca, Oaxaca City, M´exico, April 19-23, 2010. The LATIN series of conferences was launched in 1992 to foster the interaction between the Latin American t- oretical computer science community and computer scientists around the world. LATIN 2010wasthe ninth ofa series,after SaoPaulo,Brazil(1992);Valparaiso, Chile (1995); Campinas, Brazil (1998); Punta del Este, Uruguay (2000); C- cun, Mexico (2002); Buenos Aires, Argentina (2004); Valdivia, Chile (2006) and B´uzios, Rio de Janeiro, Brazil (2008). From the 155 submissions, the Program Committee selected 56 papers for presentation at the conference. The

selectionofpaperswasbasedonoriginality, quality, and relevance to theoretical computer science. It is expected that most of these papers will appear in a more complete and polished form in scienti'c journalsinthefuture.Inadditiontothecontributedpapers, thisvolumecontains the abstracts of four invited plenary talks given at the conference by Cristopher Moore, Piotr Indyk, Sergio Rajsbaum, and Leslie Valiant. A special session on the life and work of the late Imre Simon was held. Prof. Simon played a key role in the development of theoretical computer science in Latin American as well as theLATINconference.ThissessionhadcontributionsfromRicardoBaeza-Yates, John Brzozowski, Volker Diekert, and Jacques Sakarovitch.