Record Nr. UNINA9910484553203321 Computer Science - Theory and Applications : 9th International **Titolo** Computer Science Symposium in Russia, CSR 2014, Moscow, Russia, June 7-11, 2014. Proceedings / / edited by Edward Hirsch, Sergei O. Kuznetsov, Jean-Éric Pin, Nikolay Vereshchagin Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2014 **ISBN** 3-319-06686-2 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (XX, 389 p. 39 illus.) Theoretical Computer Science and General Issues, , 2512-2029; ; 8476 Collana Disciplina 004 Soggetti Algorithms Computer science—Mathematics Discrete mathematics Computer science Numerical analysis Machine theory Discrete Mathematics in Computer Science Theory of Computation **Numerical Analysis** Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory 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 author index. Nota di contenuto Finding All Solutions of Equations in Free Groups and Monoids with Involution -- Algorithmic Meta Theorems for Sparse Graph Classes --The Lattice of Definability -- Counting Popular Matchings in House Allocation Problems -- Vertex Disjoint Paths in Upward Planar Graphs -- On Lower Bounds for Multiplicative Circuits and Linear Circuits in Noncommutative Domains -- Testing low degree trigonometric polynomials -- Property Testing Bounds for Linear and Quadratic Functions via Parity Decision Trees -- A Fast Branching Algorithm for Cluster Vertex Deletion -- Separation Logic with One Quantified

Variable -- Notions of metric dimension of corona products -- On the

Complexity of Computing Two Nonlinearity Measures -- Model Checking for String Problems -- Semiautomatic Structures -- The Query Complexity of Witness Finding -- Primal implication as encryption -- Processing Succinct Matrices and Vectors -- Constraint Satisfaction with Counting Quantifiers -- Dynamic Complexity of Planar 3-connected Graph Isomorphism -- Fast Approximate Computations with Cauchy Matrices, Polynomials and Rational Functions -- First-Order Logic on CPDA Graphs -- Recognizing two-sided contexts in cubic time -- A Parameterized Algorithm for Packing Overlapping Subgraphs -- Crossing-free spanning trees in visibility graphs of points between monotone polygonal obstacles -- The Connectivity of Boolean Satisfiability -- Randomized communication complexity of approximating Kolmogorov complexity -- Space Saving by Dynamic Algebraization.

Sommario/riassunto

This book constitutes the proceedings of the 9th International Computer Science Symposium in Russia, CSR 2014, held in Moscow, Russia, in June 2014. The 27 full papers presented in this volume were carefully reviewed and selected from 76 submissions. In addition the book contains 4 invited lectures. The scope of the proposed topics is quite broad and covers a wide range of areas in theoretical computer science and its applications.