Record Nr. UNINA9910768448903321 Fundamentals of Computation Theory: 16th International Symposium, **Titolo** FCT 2007, Budapest, Hungary, August 27-30, 2007, Proceedings // edited by Erzsébet Csuhaj-Varjú, Zoltán Ésik Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-74240-9 Edizione [1st ed. 2007.] 1 online resource (XIV, 510 p.) Descrizione fisica Theoretical Computer Science and General Issues, , 2512-2029;; 4639 Collana 004 Disciplina Soggetti Computer science Algorithms Machine theory Computer graphics Computer science—Mathematics Discrete mathematics Theory of Computation Formal Languages and Automata Theory Computer Graphics 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 Invited Lectures -- Rewriting Systems with Data -- Spiking Neural P Systems: Some Characterizations -- Approximating Graphs by Graphs and Functions (Abstract) -- Traces, Feedback, and the Geometry of Computation (Abstract) -- Contributions -- A Largest Common d-Dimensional Subsequence of Two d-Dimensional Strings -- Analysis of Approximation Algorithms for k-Set Cover Using Factor-Revealing Linear Programs -- A Novel Information Transmission Problem and Its Optimal Solution -- Local Testing of Message Sequence Charts Is Difficult -- On Notions of Regularity for Data Languages -- FJMIP: A Calculus for a Modular Object Initialization -- Top-Down Deterministic Parsing of Languages Generated by CD Grammar Systems -- The Complexity of Membership Problems for Circuits over Sets of Positive

Numbers -- Pattern Matching in Protein-Protein Interaction Graphs --From Micro to Macro: How the Overlap Graph Determines the Reduction Graph in Ciliates -- A String-Based Model for Simple Gene Assembly --On the Computational Power of Genetic Gates with Interleaving Semantics: The Power of Inhibition and Degradation -- On Block-Wise Symmetric Signatures for Matchgates -- Path Algorithms on Regular Graphs -- Factorization of Fuzzy Automata -- Factorisation Forests for Infinite Words -- Marked Systems and Circular Splicing -- The Quantum Query Complexity of Algebraic Properties -- On the Topological Complexity of Weakly Recognizable Tree Languages --Productivity of Stream Definitions -- Multi-dimensional Packing with Conflicts -- On Approximating Optimal Weighted Lobbying, and Frequency of Correctness Versus Average-Case Polynomial Time --Efficient Parameterized Preprocessing for Cluster Editing --Representing the Boolean OR Function by Quadratic Polynomials Modulo 6 -- On the Complexity of Kings -- Notions of Hyperbolicity in Monoids -- P Systems with Adjoining Controlled Communication Rules -- The Simplest Language Where Equivalence of Finite Substitutions Is Undecidable -- Real-Time Reversible Iterative Arrays -- The Computational Complexity of Monotonicity in Probabilistic Networks --Impossibility Results on Weakly Black-Box Hardness Amplification --Maximal and Minimal Scattered Context Rewriting -- Strictly Deterministic CD-Systems of Restarting Automata -- Product Rules in Semidefinite Programming -- Expressive Power of LL(k) Boolean Grammars -- Complexity of Pebble Tree-Walking Automata -- Some Complexity Results for Prefix Gröbner Bases in Free Monoid Rings --Fast Asymptotic FPTAS for Packing Fragmentable Items with Costs --An O(1.787 n )-Time Algorithm for Detecting a Singleton Attractor in a Boolean Network Consisting of AND/OR Nodes.

## Sommario/riassunto

This book features the refereed proceedings of the 16th International Symposium on Fundamentals of Computation Theory. Thirty-nine full papers are presented along with four invited papers. The papers address all current topics in computation theory, including automata and formal languages, design and analysis of algorithms, computational and structural complexity, semantics, logic, circuits and networks, learning theory, and more.