Record Nr. UNINA9910484999503321 Combinatorial Algorithms [[electronic resource]]: 20th International **Titolo** Workshop, IWOCA 2009, Hradec nad Moravicí, Czech Republic, June 28--July 2, 2009, Revised Selected Papers / / edited by Jiri Fiala, Jan Kratochvil, Mirka Miller Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2009 **ISBN** 3-642-10217-4 Edizione [1st ed. 2009.] Descrizione fisica 1 online resource (XII, 480 p.) Theoretical Computer Science and General Issues, , 2512-2029;; 5874 Collana Disciplina 005.1 Soggetti Computer science—Mathematics Discrete mathematics **Algorithms** Machine theory Coding theory Information theory Discrete Mathematics in Computer Science Discrete Mathematics Formal Languages and Automata Theory Coding and Information Theory Symbolic and Algebraic Manipulation 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 Talks -- Branching Systems -- Towards Fully Multivariate Algorithmics: Some New Results and Directions in Parameter Ecology --Succinct Representations of Trees -- Kt Minors in Large t-Connected Graphs -- Intractability in Graph Drawing and Geometry: FPT Approaches -- Contributed Talks -- Evaluation of Recoverable-Robust Timetables on Tree Networks -- Weighted LCS -- Integrality Properties of Certain Special Balanceable Families -- Forbidden Subgraph Colorings and the Oriented Chromatic Number -- Polynomial Kernels for 3-Leaf Power Graph Modification Problems -- Approximating the

Max Edge-Coloring Problem -- Three Complexity Results on Coloring P

k -Free Graphs -- Fully Decomposable Split Graphs -- Feedback Vertex Set on Graphs of Low Cliquewidth -- Note on Decomposition of K n,n into (0,i)-prisms -- Edge-Simple Circuits through 10 Ordered Vertices in Square Grids -- Efficient Neighborhood Encoding for Interval Graphs and Permutation Graphs and O(n) Breadth-First Search -- LPF Computation Revisited -- Limiting Distribution for Distances in k-Trees -- Gray Code Compression -- Embedded Trees and the Support of the ISE -- Combinatorial Models for Cooperation Networks -- Polar Permutation Graphs -- A New Algorithm for Efficient Pattern Matching with Swaps -- The Height and Range of Watermelons without Wall --Fast Convolutions and Their Applications in Approximate String Matching -- Better Polynomial Algorithms on Graphs of Bounded Rank-Width -- Minimax Trees in Linear Time with Applications -- Planar Biconnectivity Augmentation with Fixed Embedding -- Trivially-Perfect Width -- Lightweight Parameterized Suffix Array Construction -- On the Crossing Numbers of Cartesian Products of Stars and Graphs on Five Vertices -- Factorizations of Complete Graphs into Spanning Trees with All Possible Maximum Degrees -- On the Maximal Number of Cubic Subwords in a String -- Solution of Peter Winkler's Pizza Problem -- An O(n)-Time Algorithm for the Paired-Domination Problem on Permutation Graphs -- Simpler Parameterized Algorithm for OCT --Bipartite Graphs of Large Clique-Width -- Kernel in Oriented Circulant Graphs -- Randomized Postoptimization of Covering Arrays -- New Word-Based Adaptive Dense Compressors -- Rainbow Connection in Graphs with Minimum Degree Three -- The Complexity of Almost Perfect Matchings in Uniform Hypergraphs with High Codegree --Computability of Width of Submodular Partition Functions -- The Guarding Problem – Complexity and Approximation -- Antibandwidth of d-Dimensional Meshes.

## Sommario/riassunto

This book constitutes the revised selected papers of the 20th International Workshop on Combinatorial Algorithms, held in June/July 2009 in the castle of Hradec nad Moravicí, Czech Republic. The 41 papers included in this volume together with 5 invited papers were carefully reviewed and selected from over 100 submissions. The topics dealt with are algorithms and data structures, applications, combinatorial enumeration, combinatorial optimization, complexity theory, computational biology, databases, decompositions and combinatorial designs, discrete and computational geometry, including graph drawing, and graph theory and combinatorics.