Record Nr. UNISA996465915003316 Graph-Theoretic Concepts in Computer Science [[electronic resource]]: **Titolo** 35th International Workshop, WG 2009, Montpellier, France, June 24-26, 2009, Revised Papers / / edited by Christophe Paul, Michel Habib Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2010 **ISBN** 1-280-38546-4 9786613563385 3-642-11409-1 [1st ed. 2010.] Edizione Descrizione fisica 1 online resource (XIII, 353 p.) Theoretical Computer Science and General Issues, , 2512-2029;; 5911 Collana Classificazione **DAT 537f MAT 055f** SS 4800 Disciplina 004.015115 Soggetti Computer science—Mathematics Discrete mathematics Geometry Algorithms Artificial intelligence—Data processing Discrete Mathematics in Computer Science Symbolic and Algebraic Manipulation Data 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 Graph-Theoretic Solutions to Computational Geometry Problems --Algorithms for Classes of Graphs with Bounded Expansion -- A Graph Polynomial Arising from Community Structure (Extended Abstract) --Fast Exact Algorithms for Hamiltonicity in Claw-Free Graphs --Maximum Series-Parallel Subgraph -- Low-Port Tree Representations -- Fully Dynamic Representations of Interval Graphs -- The Parameterized Complexity of Some Minimum Label Problems -- Exact and Parameterized Algorithms for Max Internal Spanning Tree -- An

Exact Algorithm for Minimum Distortion Embedding -- Sub-coloring

and Hypo-coloring Interval Graphs -- Parameterized Complexity of Generalized Domination Problems -- Connected Feedback Vertex Set in Planar Graphs -- Logical Locality Entails Frugal Distributed Computation over Graphs (Extended Abstract) -- On Module-Composed Graphs -- An Even Simpler Linear-Time Algorithm for Verifying Minimum Spanning Trees -- The k-Disjoint Paths Problem on Chordal Graphs -- Local Algorithms for Edge Colorings in UDGs --Directed Rank-Width and Displit Decomposition -- An Algorithmic Study of Switch Graphs -- Hardness Results and Efficient Algorithms for Graph Powers -- Graph Partitioning and Traffic Grooming with Bounded Degree Request Graph -- Injective Oriented Colourings --Chordal Digraphs -- A New Intersection Model and Improved Algorithms for Tolerance Graphs -- Counting the Number of Matchings in Chordal and Chordal Bipartite Graph Classes -- Distance d-Domination Games -- Cycles, Paths, Connectivity and Diameter in Distance Graphs -- Smallest Odd Holes in Claw-Free Graphs (Extended Abstract) -- Finding Induced Paths of Given Parity in Claw-Free Graphs.

Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 35th International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2009, held in Montpellier, France, in June 2009. The 28 revised full papers presented together with two invited papers were carefully reviewed and selected from 69 submissions. The papers feature original results on all aspects of graph-theoretic concepts in Computer Science, e.g. structural graph theory, sequential, parallel, and distributed graph and network algorithms and their complexity, graph grammars and graph rewriting systems, graph-based modeling, graph-drawing and layout, diagram methods, and support of these concepts by suitable implementations.