Record Nr. UNISA996465640103316 Graph-Theoretic Concepts in Computer Science [[electronic resource]]: **Titolo** 17th International Workshop WG '91, Fischbachau, Germany, June 17-19, 1991. Proceedings / / edited by Gunther Schmidt, Rudolf Berghammer Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1992 **ISBN** 3-540-46735-1 Edizione [1st ed. 1992.] Descrizione fisica 1 online resource (VIII, 256 p.) Lecture Notes in Computer Science, , 0302-9743;; 570 Collana Disciplina 004.0151 Soggetti Computer science—Mathematics **Algorithms** Combinatorics Computers Data structures (Computer science) Logic design Mathematics of Computing Algorithm Analysis and Problem Complexity Computation by Abstract Devices **Data Structures** Logic Design Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Approximating treewidth, pathwidth, and minimum elimination tree height -- Monadic second-order evaluations on tree-decomposable graphs -- Optimal embedding of complete binary trees into lines and grids -- Graph rewriting systems and their application to network reliability analysis -- Nondeterministic control structures for graph rewriting systems -- A language for generic graph-transformations --

Attributed elementary programmed graph grammars -- The complexity of approximating the class Steiner tree problem -- On complexity of some chain and antichain partition problems -- Tight bounds for the rectangular art gallery problem -- Voronoi diagrams of moving points

in the plane -- Using maximal independent sets to solve problems in parallel -- Fast parallel algorithms for coloring random graphs -- Optimal vertex ordering of a graph and its application to symmetry detection -- Edge separators for graphs of bounded genus with applications -- Line digraph iterations and the spread concept—with application to graph theory, fault tolerance, and routing -- A generalized encryption scheme based on random graphs -- Dynamic algorithms for shortest paths in planar graphs -- Complete problems for logspace involving lexicographic first paths in graphs -- A new upper bound on the complexity of the all pairs shortest path problem -- On the crossing number of the hypercube and the cube connected cycles -- Logic arrays for interval indicator functions -- On the broadcast time of the butterfly network -- On disjoint cycles -- Short disjoint cycles in cubic bridgeless graphs.

Sommario/riassunto

This volume contains contributions to the 17th International workshop on Graph-Theoretic Concepts in Computer Science (WG '91) held in Southern Bavaria in June 1991. These annual workshops are designed to bring together researchers using graph-theoretic methods to discuss new developments relating to or emerging from a diversity of application fields. The topics covered in this volume include: tree-related problems, graph grammarsand rewriting, complexity, computational geometry, parallel algorithms, vertex orderings, pathoriented algorithms, applications to VLSI, and disjoint cycle problems.