Record Nr. UNISA996465674403316 Graph-Theoretic Concepts in Computer Science [[electronic resource]]: **Titolo** International Workshop WG '86 Bernried, Federal Republic of Germany, June 17-19, 1986, Proceedings / / edited by Gottfried Tinhofer, Gunther Schmidt Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1987 **ISBN** 3-540-47415-3 Edizione [1st ed. 1987.] Descrizione fisica 1 online resource (X, 314 p.) Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 246 Disciplina 004.0151 Soggetti Computers Combinatorics Computer communication systems Theory of Computation Computation by Abstract Devices Computer Communication Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto A simple linear-time algorithm to recognize interval graphs -- On approximation algorithms for Steiner's problem in graphs --Specification of error distances for graphs by precedence graph grammars and fast recognition of similarity -- ADA concurrency specified by graph grammars -- Cabri, an interactive system for graph manipulation -- An interactive graphical manipulation system for higher objects based on relational algebra -- Behaviour preserving refinements of Petri nets -- The bandwidth of planar distributive lattices -- The node visit cost of brother trees -- Searching connected components in very large grid graphs -- A simple implementation of Warshall's algorithm on a visi chip -- On some generalizations of outerplanar graphs: Results and open problems -- Recognizing outerplanar graphs in linear time -- Graphs and graph polynomials of interest in chemistry -- Applications of parallel scheduling to perfect

graphs -- A graph-theoretic approach for designing fair distributed

Sommario/riassunto

resource scheduling algorithms -- Improved diameter bounds for altered graphs -- Separability of sets of polygons -- Centipede graphs and visibility on a cylinder -- The diameter of connected components of random graphs -- An algorithm for testing planarity of hierarchical graphs -- EDM — A data model for electronic CAD/CAM-applications. Graph-theoretic concepts are developed by computer scientists in order to model algorithms, nets, rewriting systems, distributed systems, parallelism, geometric and layout concepts. Their complexity is studied under various randomness assumptions. This volume contains contributions to the twelfth of a series of annual workshops designed to bring together researchers using graph-theoretic methods. Its purpose is to broadcast emerging new developments from and to a diversity of application fields. The topics covered include: Graph Grammars, Graph Manipulation, Nets, Complexity Issues, Algorithmic and Network Considerations, Outerplanar Graphs, Graph Isomorphism, Parallelism and Distributed Systems, Graphs and Geometry, Randomness Considerations, Applications in Chemistry, Specific Algorithms. N.