Record Nr. UNISA996466261003316 Graph-Theoretic Concepts in Computer Science [[electronic resource]]: **Titolo** 19th International Workshop, WG '93, Utrecht, The Netherlands, June 16 - 18, 1993. Proceedings / / edited by Jan van Leeuwen Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa . 1994 **ISBN** 3-540-48385-3 Edizione [1st ed. 1994.] 1 online resource (XI, 437 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 790 Collana 004/.01/5115 Disciplina Soggetti Computers Discrete mathematics Application software Algorithms Combinatorics Computer logic Theory of Computation **Discrete Mathematics Computer Applications** Algorithm Analysis and Problem Complexity Logics and Meanings of Programs Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Near-optimal dominating sets in dense random graphs in polynomial expected time -- Approximating minimum weight perfect matchings for complete graphs satisfying the triangle inequality -- Hierarchically specified unit disk graphs -- Bounded tree-width and LOGCFL -- On reduction algorithms for graphs with small treewidth -- Algorithms and complexity of sandwich problems in graphs (extended abstract) -- Online graph algorithms for incremental compilation -- Average case analysis of fully dynamic connectivity for directed graphs -- Fully dynamic maintenance of vertex cover -- Dynamic algorithms for

graphs with treewidth 2 -- Short disjoint cycles in graphs with degree constraints -- Efficient algorithms for tripartitioning triconnected

graphs and 3-edge-connected graphs -- Towards a solution of the Holyer's problem -- Graphs, hypergraphs and hashing -- Coloring kcolorable graphs in constant expected parallel time -- Deciding 3colourability in less than O(1.415n) steps -- A rainbow about Tcolorings for complete graphs -- Approximating the chromatic polynomial of a graph -- Asteroidal triple-free graphs -- The parallel complexity of elimination ordering procedures -- Dually chordal graphs -- The size of reduced OBDDs and optimal read-once branching programs for almost all Boolean functions -- Regular marked Petri nets -- The asynchronous committee meeting problem --Gossiping in vertex-disjoint paths mode in interconnection networks --The folded Petersen network: A new versatile multiprocessor interconnection topology -- Fast load balancing in Cayley graphs and in circuits -- Concurrent flows and packet routing in Cayley graphs (Preliminary version) -- On multi-label linear interval routing schemes -- An 'All pairs shortest paths' distributed algorithm using 2n 2 messages -- Linear layouts of generalized hypercubes -- Graph ear decompositions and graph embeddings -- Improved bounds for the crossing numbers on surfaces of genus g -- Two algorithms for finding rectangular duals of planar graphs -- A more compact visibility representation.

Sommario/riassunto

This volume contains the proceedings of the 19th International Workshop on Graph-Theoretic Concepts in Computer Science, WG '93, held near Utrecht, The Netherlands, in 1993. The papers are grouped into parts on: hard problems on classes of graphs, structural graph theory, dynamic graph algorithms, structure-oriented graph algorithms, graph coloring, AT-free and chordal graphs, circuits and nets, graphs and interconnection networks, routing and shortest paths, and graph embedding and layout. The 35 revised papers were chosen from 92 submissions after a careful refereeing process.