Record Nr. UNISA996465711003316 Graph-Theoretic Concepts in Computer Science [[electronic resource]]: **Titolo** International Workshop WG '87, Kloster Banz/Staffelstein, FRG, June 29 - July 1, 1987. Proceedings / / edited by Herbert Göttler, Hans-Jürgen Schneider Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1988 **ISBN** 3-540-39264-5 Edizione [1st ed. 1988.] Descrizione fisica 1 online resource (VIII, 256 p.) Collana Lecture Notes in Computer Science, , 0302-9743; ; 314 Disciplina 004.0151 Soggetti Computers Mathematics **Algorithms** Theory of Computation Mathematics, general Algorithm Analysis and Problem Complexity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Distributed parallelism of graph transformations -- A PrT-net representation of graph grammars -- Pretty patterns produced by hyperedge replacement -- Graph languages defined by systems of forbidden structures: A survey -- A sweepcircle algorithm for Voronoi diagrams -- Competitive location in the L1 and Linf metrics -- Priority search trees in secondary memory (extended abstract) -- On the analysis of grid structures for spatial objects of non-zero size --Maintenance of transitive closures and transitive reductions of graphs -- Upward drawings of acyclic digraphs -- Approximate counting, uniform generation and rapidly mixing markov chains extended abstract -- On chaotic behaviour of some np-complete problems --External labeling and algorithms for hierarchic networks -- Designing gamma-acyclic database schemes using decomposition and

augmentation techniques -- Graph-theoretical tools and their use in a practical distributed operating system design case -- Development of

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several reachability algorithms for directed graphs -- On integration mechanisms within a graph-based software development environment -- Restructuring aspect graphs into aspect- and cell-equivalence classes for use in computer vision -- Automatic crystal chemical classification of silicates using direction-labeled graphs.

This book reflects the scientific program of the annual workshop on Graph-theoretic Concepts in Computer Science in 1987. The purpose of this conference is to be the "missing link" between theory and application of graphs in as many branches of computer science as a conference scheduled for three days without parallel sessions can permit. So the organizers of WG '87 addressed a selected group of people with a strong interest in theory and practice. The proceedings include latest results on "classical" graph-theoretic problems (including formal language theory applied to graphs) and how to apply those results to practical problems, e.g. data bases, layout of graph operating systems, software engineering, chemistry, and modelling with graphs.