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Disciplina	005.1
Soggetti	Algorithms Computer science—Mathematics Discrete mathematics Numerical analysis Artificial intelligence—Data processing Computer graphics Discrete Mathematics in Computer Science Numerical Analysis Data Science Computer Graphics
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Formato	Materiale a stampa
Livello bibliografico	Monografia
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Treewidth: Characterizations, Applications, and Computations -- Locally Injective Graph Homomorphism: Lists Guarantee Dichotomy -- Generalised Dualities and Finite Maximal Antichains -- Chordal Deletion Is Fixed-Parameter Tractable -- A Fixed-Parameter Algorithm for the Minimum Weight Triangulation Problem Based on Small Graph Separators -- Divide-and-Color -- Listing Chordal Graphs and Interval Graphs -- A Branch-and-Reduce Algorithm for Finding a Minimum Independent Dominating Set in Graphs -- Improved Edge-Coloring with Three Colors -- Vertex Coloring of Comparability+ke and -ke Graphs -- Convex Drawings of Graphs with Non-convex Boundary -- How to Sell a Graph: Guidelines for Graph Retailers -- Strip Graphs: Recognition and Scheduling -- Approximating the Traffic Grooming

Problem in Tree and Star Networks -- Bounded Arboricity to Determine the Local Structure of Sparse Graphs -- An Implicit Representation of Chordal Comparability Graphs in Linear-Time -- Partitioned Probe Comparability Graphs -- Computing Graph Polynomials on Graphs of Bounded Clique-Width -- Generation of Graphs with Bounded Branchwidth -- Minimal Proper Interval Completions -- Monotony Properties of Connected Visible Graph Searching -- Finding Intersection Models of Weakly Chordal Graphs -- A Fully Dynamic Algorithm for the Recognition of P 4-Sparse Graphs -- Clique Graph Recognition Is NP-Complete -- Homogeneity vs. Adjacency: Generalising Some Graph Decomposition Algorithms -- Certifying Algorithms for Recognizing Proper Circular-Arc Graphs and Unit Circular-Arc Graphs -- Graph Labelings Derived from Models in Distributed Computing -- Flexible Matchings -- Simultaneous Graph Embeddings with Fixed Edges -- Approximation Algorithms for Restricted Cycle Covers Based on Cycle Decompositions -- Circular-Perfect Concave-Round Graphs.

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### Sommario/riassunto

The 32nd International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2006) was held on the island of Sotra close to the city of Bergen on the west coast of Norway. The workshop was organized by the Algorithms Research Group at the Department of Informatics, University of Bergen, and it took place from June 22 to June 24. The 78 participants of WG 2006 came from the universities and research institutes of 17 different countries. The WG 2006 workshop continues the series of 31 previous WG workshops. Since 1975, WG has taken place 20 times in Germany, four times in The Netherlands, twice in Austria as well as once in France, in Italy, in Slovakia, in Switzerland and in the Czech Republic, and has now been held for the first time in Norway. The workshop aims at uniting theory and practice by demonstrating how graph-theoretic concepts can be applied to various areas in computer science, or by extracting new problems from applications. The goal is to present recent research results and to identify and explore directions of future research. The talks showed how recent research results from algorithmic graph theory can be used in computer science and which graph-theoretic questions arise from new developments in computer science. There were two fascinating invited lectures by Hans Bodlaender (Utrecht, The Netherlands) and Tandy Warnow (Austin, USA).

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