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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Two $O(\log^* k)$ -Approximation Algorithms for the Asymmetric k -Center Problem -- Strongly Polynomial Algorithms for the Unsplittable Flow Problem -- Edge Covers of Setpairs and the Iterative Rounding Method -- The Asymptotic Performance Ratio of an On-Line Algorithm for Uniform Parallel Machine Scheduling with Release Dates -- Approximate k -MSTs and k -Steiner Trees via the Primal-Dual Method and Lagrangean Relaxation -- On the Rank of Mixed $0,1$ Polyhedra -- Fast 2-Variable Integer Programming -- Approximating k -Spanner Problems for $k > 2$ -- A Matroid Generalization of the Stable Matching Polytope -- A 2-Approximation for Minimum Cost $\{0, 1, 2\}$ Vertex

Connectivity -- Combined Connectivity Augmentation and Orientation Problems -- An Extension of a Theorem of Henneberg and Laman -- Bisubmodular Function Minimization -- On the Integrality Gap of a Natural Formulation of the Single-sink Buy-at-Bulk Network Design Problem -- Circuit Mengerian Directed Graphs -- Integral Polyhedra Related to Even Cycle and Even Cut Matroids -- A Unified Framework for Obtaining Improved Approximation Algorithms for Maximum Graph Bisection Problems -- Synthesis of 2-Commodity Flow Networks -- Bounds for Deterministic Periodic Routing sequences -- Cutting Planes for Mixed 0-1 Semidefinite Programs -- Independence Free Graphs and Vertex connectivity Augmentation -- The Throughput of Sequential Testing -- An Explicit Exact SDP Relaxation for Nonlinear 0-1 Programs -- Pruning by Isomorphism in Branch-and-Cut -- Facets, Algorithms, and Polyhedral Characterizations for a Multi-item Production Planning Model with Setup Times -- Fences Are Futile: On Relaxations for the Linear Ordering Problem -- Generating Cuts from Multiple-Term Disjunctions -- A $(2+\epsilon)$ -Approximation Algorithm for Generalized Preemptive Open Shop Problem with Minsum Objective -- Performance Guarantees of Local Search for Multiprocessor Scheduling -- connected Joins in Graphs -- Two NP-hardness Results for Preemptive Minsum Scheduling of Unrelated Parallel Machines -- Approximation Algorithms for the Minimum Bends Traveling Salesman Problem.

Sommario/riassunto

This volume contains the papers selected for presentation at IPCO VIII, the Eighth Conference on Integer Programming and Combinatorial Optimization, Utrecht, The Netherlands, 2001. This meeting is a forum for researchers and practitioners working on various aspects of integer programming and combinatorial optimization. The aim is to present recent developments in theory, computation, and application of integer programming and combinatorial optimization. Topics include, but are not limited to: approximation algorithms, branch and bound algorithms, computational biology, computational complexity, computational geometry, cutting plane algorithms, diophantine equations, geometry of numbers, graph and network algorithms, integer programming, matroids and submodular functions, on-line algorithms, polyhedral combinatorics, scheduling theory and algorithms, and semidefinite programs. IPCO was established in 1988 when the first IPCO program committee was formed. The locations and years of the seven first IPCO conferences were: IPCO I, Waterloo (Canada) 1990, IPCO II, Pittsburgh (USA) 1992, IPCO III, Venice (Italy) 1993, IPCO IV, Copenhagen (Denmark) 1995, IPCO V, Vancouver (Canada) 1996, IPCO VI, Houston (USA) 1998, IPCO VII, Graz (Austria) 1999. IPCO is held every year in which no MPS (Mathematical Programming Society) International Symposium takes place. Since the MPS meeting is triennial, IPCO conferences are held twice in every three-year period. As a rule, IPCO is held somewhere in Northern America in even years, and somewhere in Europe in odd years.
