1. Record Nr. UNINA9910768194503321

Titolo	Integer Programming and Combinatorial Optimization : 12th International IPCO Conference, Ithaca, NY, USA, June 25-27, 2007, Proceedings / / edited by Matteo Fischetti, David P. Williamson
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2007
ISBN	1-280-94938-4 9786610949380 3-540-72792-2
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (508 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 4513
Disciplina	519.77
Soggetti	Computer science Software engineering Probabilities Computer science - Mathematics Discrete mathematics Numerical analysis Algorithms Theory of Computation Software Engineering Probability Theory Discrete Mathematics in Computer Science Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Session 1 -- Inequalities from Two Rows of a Simplex Tableau -- Cuts for Conic Mixed-Integer Programming -- Sequential-Merge Facets for Two-Dimensional Group Problems -- Session 2 -- Triangle-Free Simple 2-Matchings in Subcubic Graphs (Extended Abstract) -- The Smoothed Number of Pareto Optimal Solutions in Bicriteria Integer Optimization -- Finding a Polytope from Its Graph in Polynomial Time -- Session 3 -- Orbitopal Fixing -- New Variants of Lift-and-Project

Cut Generation from the LP Tableau: Open Source Implementation and Testing -- Orbital Branching -- Session 4 -- Distinct Triangle Areas in a Planar Point Set -- Scheduling with Precedence Constraints of Low Fractional Dimension -- Approximation Algorithms for 2-Stage Stochastic Scheduling Problems -- Session 5 -- On Integer Programming and the Branch-Width of the Constraint Matrix -- Matching Problems in Polymatroids Without Double Circuits -- Maximizing a Submodular Set Function Subject to a Matroid Constraint (Extended Abstract) -- Session 6 -- On a Generalization of the Master Cyclic Group Polyhedron -- A Framework to Derive Multidimensional Superadditive Lifting Functions and Its Applications -- On the Exact Separation of Mixed Integer Knapsack Cuts -- Session 7 -- A Faster Strongly Polynomial Time Algorithm for Submodular Function Minimization -- On Convex Minimization over Base Polytopes -- Computational Geometric Approach to Submodular Function Minimization for Multiclass Queueing Systems -- Session 8 -- Generating Multiple Solutions for Mixed Integer Programming Problems -- A Branch and Bound Algorithm for Max-Cut Based on Combining Semidefinite and Polyhedral Relaxations -- DINS, a MIP Improvement Heuristic -- Session 9 -- Mixed-Integer Vertex Covers on Bipartite Graphs -- On the MIR Closure of Polyhedra -- The Intersection of ContinuousMixing Polyhedra and the Continuous Mixing Polyhedron with Flows -- Session 10 -- Simple Explicit Formula for Counting Lattice Points of Polyhedra -- Characterizations of Total Dual Integrality -- Sign-Solvable Linear Complementarity Problems -- Session 11 -- An Integer Programming Approach for Linear Programs with Probabilistic Constraints -- Infrastructure Leasing Problems -- Robust Combinatorial Optimization with Exponential Scenarios -- Session 12 -- Approximation Algorithms for the Multi-item Capacitated Lot-Sizing Problem Via Flow-Cover Inequalities -- Optimal Efficiency Guarantees for Network Design Mechanisms -- The Set Connector Problem in Graphs.

Sommario/riassunto

This book constitutes the refereed proceedings of the 12th International Conference on Integer Programming and Combinatorial Optimization, IPCO 2007, held in Ithaca, NY, USA, in June 2007. The 36 revised full papers presented were carefully reviewed and selected from over 120 submissions. Among the topics addressed are approximation algorithms, algorithmic game theory, branch and bound algorithms, branch and cut 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 and competitive analysis, polyhedral combinatorics, randomized algorithms, random graphs, scheduling theory and scheduling algorithms, as well as semidefinite programs.