

1. Record Nr.	UNISA996465776403316
Titolo	Integer Programming and Combinatorial Optimization [[electronic resource]] : 18th International Conference, IPCO 2016, Liège, Belgium, June 1-3, 2016, Proceedings / / edited by Quentin Louveaux, Martin Skutella
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-33461-1
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIII, 412 p. 33 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 9682
Disciplina	519.77
Soggetti	Numerical analysis Algorithms Computer science—Mathematics Discrete mathematics Computer networks Numerical Analysis Discrete Mathematics in Computer Science Computer Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	On Approximation Algorithms for Concave Mixed-Integer Quadratic Programming -- Centerpoints: A link between optimization and convex geometry -- Rescaled coordinate descent methods for Linear Programming -- Approximating Min-Cost Chain-Constrained Spanning Trees: A Reduction from Weighted to Unweighted Problems -- Max-Cut under Graph Constraints -- Sparsest cut in planar graphs, maximum concurrent flows and their connections with the max-cut problem -- Intersection Cuts for Bilevel Optimization -- Exact Algorithms for the Chance-Constrained Vehicle Routing Problem -- Extended Formulations in Mixed-integer Convex Programming -- k- Trails: Recognition, Complexity, and Approximations -- Better s-t Tours by Gao Trees -- Popular Edges and Dominant Matchings -- Semidefinite and linear programming integrality gaps for scheduling

identical machines -- Stabilizing network bargaining games by blocking players -- Round Robin Tournaments Generated by the Circle Method have Maximum Carry-Over -- Extreme Functions with an Arbitrary Number of Slopes -- Minimal cut-generating functions are nearly extreme -- On the Mixed Binary Representability of Ellipsoidal Regions -- Constant Factor Approximation for ATSP with Two Edge Weights -- Improved Approximation Algorithms for Hitting 3-Vertex Paths -- Improved Approximations for Cubic Bipartite and Cubic TSP -- An approximation algorithm for Uniform Capacitated k-Median problem with $1 + \epsilon$ capacity violation -- Valid Inequalities for Separable Concave Constraints with Indicator Variables -- A Polyhedral Approach to Online Bipartite Matching -- On Some Polytopes Contained in the $[0,1]^n$ Hypercube that Have a Small Chvátal Rank -- Robust Monotone Submodular Function Maximization -- Maximizing Monotone Submodular Functions over the Integer Lattice -- Submodular Unsplittable Flow on Trees -- Strong reductions for extended formulations -- Sum-of-squares lower bounds for maximally symmetric formulations -- Sum-of-squares lower bounds for maximally symmetric formulations -- Deciding Emptiness of the Gomory-Chvátal Closure is NP-Complete, Even for a Rational Polyhedron Containing No Integer Point -- On the quantile cut closure of chance-constrained problems.

Sommario/riassunto

This book constitutes the refereed proceedings of the 18th International Conference on Integer Programming and Combinatorial Optimization, IPCO 2016, held in Liège, Belgium, in June 2016. The 33 full papers presented were carefully reviewed and selected from 125 submissions. The conference 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 applications in these areas. The scope of IPCO is viewed in a broad sense, to include algorithmic and structural results in integer programming and combinatorial optimization as well as revealing computational studies and novel applications of discrete optimization to practical problems.
