Record Nr. UNISA996466177203316 Integer Programming and Combinatorial Optimization [[electronic **Titolo** resource]]: 19th International Conference, IPCO 2017, Waterloo, ON, Canada, June 26-28, 2017, Proceedings / / edited by Friedrich Eisenbrand, Jochen Koenemann Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-59250-5 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XI, 456 p. 34 illus.) Theoretical Computer Science and General Issues, , 2512-2029;; Collana 10328 Disciplina 519.77 Numerical analysis Soggetti Algorithms Computer science—Mathematics Discrete mathematics Computer networks Artificial intelligence **Numerical Analysis** Discrete Mathematics in Computer Science Computer Communication Networks Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. The Two-point Fano and Ideal Binary Clutters -- On Scheduling Nota di contenuto Coflows -- Integrality Gaps of Integer Knapsack Problems -- An Improved Integrality Gap for the Calinescu-Karloff-Rabani Relaxation for Multiway Cut -- Approximation of Corner Polyhedra with Families of Intersection Cuts -- The Structure of the Infinite Models in Integer Programming -- Mixed-integer Linear Representability, Disjunctions. and Variable Elimination -- Deterministic Fully Dynamic Approximate Vertex Cover and Fractional Matching in O(1) Amortized Update Time

-- Cutting Planes from Wide Split Disjunctions -- The Salesman's Improved Tours for Fundamental Classes -- The Heterogeneous

Capacitated k-Center Problem -- Local Guarantees in Graph Cuts and Clustering -- Verifying Integer Programming Results -- Long term Behavior of Dynamic Equilibria in uid Queuing Networks -- A 4/5 -Approximation Algorithm for the Maximum Traveling Salesman Problem -- Minimizing Multimodular Functions and Allocating Capacity in Bike-sharing Systems -- Compact, Provably-Good LPs for Orienteering and Regret-Bounded Vehicle Routing -- Discrete Newton's Algorithm for Parametric Submodular Function Minimization --Stochastic Online Scheduling on Unrelated Machines -- Online Matroid Intersection: Beating Half for Random Arrival -- Number Balancing is as Hard as Minkowski's Theorem and Shortest Vector -- An Improved Deterministic Rescaling for Linear Programming Algorithms -- Min-Max Theorems for Packing and Covering Odd (u; v)-trails -- Breaking 1 - 1/e Barrier for Non-preemptive Throughput Maximization -- A Quasi-Polynomial Approximation for the Restricted Assignment Problem -- Adaptive Submodular Ranking -- On the Notions of Facets. Weak Facets, and Extreme Functions of the Gomory-Johnson Infinite Group Problem -- Minimum Birkhoff-von Neumann Decomposition --Maximum Matching in the Online Batch-Arrival Model -- Budget Feasible Mechanisms on Matroids -- Deterministic Discrepancy Minimization Via the Multiplicative Weight Update Method -- Mixedinteger Convex Representability -- High Degree Sum of Squares Proofs. Bienstock-Zuckerberg Hierarchy and Chvatal-Gomory Cuts --Enumeration of Integer Points in Projections of Unbounded Polyhedral -- Excluded t-factors in Bipartite Graphs: A Unified Framework for Nonbipartite Matchings and Restricted 2-matchings -- Equilibrium Computation in Atomic Splittable Singleton Congestion Games. .

Sommario/riassunto

This book constitutes the refereed proceedings of the 19th International Conference on Integer Programming and Combinatorial Optimization, IPCO 2017, held in Waterloo, IN, Canada, in June 2017. The 36 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.