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Soggetti	Computer science—Mathematics Computer networks Algorithms Data structures (Computer science) Information theory Software engineering Mathematics of Computing Computer Communication Networks Design and Analysis of Algorithms Data Structures and Information Theory Software Engineering
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Nota di contenuto	Improving the Approximation Ratio for Capacitated Vehicle Routing -- Online k-Taxi via Double Coverage and Time-Reverse Primal-Dual -- Approximating the discrete time-cost tradeoff problem with bounded depth -- Sum-of-squares hierarchies for binary polynomial optimization -- Complexity, Exactness, and Rationality in Polynomial Optimization -- On the Geometry of Symmetry Breaking Inequalities -- Affinely representable lattices, stable matchings, and choice functions -- A Finite Time Combinatorial Algorithm for Instantaneous Dynamic Equilibrium Flows -- A combinatorial algorithm for computing the

degree of the determinant of a generic partitioned polynomial matrix with 2×2 submatrices -- On the implementation and strengthening of intersection cuts for QCQPs -- Lifting Convex Inequalities for Bipartite Bilinear Programs -- A Computational Status Update for Exact Rational Mixed Integer Programming -- New Exact Techniques Applied to a Class of Network Flow Formulations -- Multi-cover Inequalities for Totally-Ordered Multiple Knapsack Sets -- Semi-Streaming Algorithms for Submodular Matroid Intersection -- Pfaffian Pairs and Parities: Counting on Linear Matroid Intersection and Parity Problems -- On the recognition of {a,b,c}-modular matrices -- On the Power of Static Assignment Policies for Robust Facility Location Problems -- Robust k-Center with Two Types of Radii -- Speed-Robust Scheduling - Rocks, Bricks, and Sand -- The Double Exponential Runtime is Tight for 2-Stage Stochastic ILPs -- Fast Quantum Subroutines for the Simplex Method -- Maximum Weight Disjoint Paths in Outerplanar Graphs via Single-Tree Cut Approximators -- A Tight Approximation Algorithm for the Cluster Vertex Deletion Problem -- Fixed Parameter Approximation Scheme for Min-max k-cut -- Computational Aspects of Relaxation Complexity -- Complexity of branch-and-bound and cutting planes in mixed-integer optimization – II -- Face Dimensions of General-Purpose Cutting Planes for Mixed-Integer Linear Programs -- Proximity bounds for random integer programs -- On the Integrality Gap of Binary Integer Programs with Gaussian Data -- Linear Regression with Mismatched Data: a Provably Optimal Local Search Algorithm -- A New Integer Programming Formulation of the Graphical Traveling Salesman Problem -- Implications, conflicts, and reductions for Steiner trees.

Sommario/riassunto

This book constitutes the proceedings of the 22nd Conference on Integer Programming and Combinatorial Optimization, IPCO 2021, which took place during May 19-21, 2021. The conference was organized by Georgia Institute of Technology and planned to take place it Atlanta, GA, USA, but changed to an online format due to the COVID-19 pandemic. The 33 papers included in this book were carefully reviewed and selected from 90 submissions. IPCO is under the auspices of the Mathematical Optimization Society, and it is an important forum for presenting the latest results of theory and practice of the various aspects of discrete optimization.