Record Nr. UNISA996466364503316 Combinatorial Algorithms [[electronic resource]]: 30th International **Titolo** Workshop, IWOCA 2019, Pisa, Italy, July 23–25, 2019, Proceedings // edited by Charles J. Colbourn, Roberto Grossi, Nadia Pisanti Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-25005-9 Edizione [1st ed. 2019.] 1 online resource (XIX, 456 p. 335 illus., 47 illus. in color.) Descrizione fisica Collana Theoretical Computer Science and General Issues, , 2512-2029;; 11638 511.6 Disciplina Soggetti Computer science—Mathematics Discrete mathematics Algorithms Artificial intelligence—Data processing Computer arithmetic and logic units Computer graphics Discrete Mathematics in Computer Science Data Science Arithmetic and Logic Structures **Computer Graphics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto A note on handicap incomplete tournaments -- Computing the k-Crossing Visibility Region of a Point in a Polygon -- An Improved Scheme in the Two Query Adaptive Bitprobe Model -- On Erds Szekeres-type problems for k-convex point sets -- Algorithms and Hardness results on Liar's Dominating Set and k-tuple Dominating Set -- Fixed-parameter tractability of (n-k) List Coloring -- Finding Periods in Cartesian Tree Matching -- Parameterized Complexity of Min-Power Asymmetric Connectivity -- Solving Group Interval Scheduling Efficiently -- Call Admission on Trees with Advice (Extended Abstract) -- Power Edge Set and Zero Forcing Set remain difficult in cubic graphs

-- Towards a Complexity Dichotomy for Colourful Components

Problems on k-caterpillars and Small-Degree Planar Graphs -- Maximal irredundant set enumeration in bounded-degeneracy and boundeddegree hypergraphs -- Dual Domination -- Reaching 3-Connectivity via Edge-edge Additions -- Cops and robber on some families of oriented graphs -- Disjoint clustering in combinatorial circuits -- The hull number in the convexity of induced paths of order 3 --Supermagic graphs with many odd degrees -- Incremental algorithm for minimum cut and edge connectivity in Hypergraph -- A General Algorithmic Scheme for Modular Decompositions of Hypergraphs and Applications -- Shortest-Path-Preserving Rounding -- Complexity and Algorithms for Semipaired Domination in Graphs -- Computing the Rooted Triplet Distance between Phylogenetic Networks --Parameterized Algorithms for Graph Burning Problem -- Extension and its price for the connected vertex cover problem -- An Improved Fixed-Parameter Algorithm for Max-Cut Parameterized by Crossing Number -- An Efficient Algorithm for Enumerating Chordal Bipartite Induced Subgraphs in Sparse Graphs -- Complexity of fall coloring for restricted graph classes -- Succinct Representation of Linear Extensions via MDDs and Its Application to Scheduling under Precedence Constraints --Maximum clique exhaustive search in circulant k-hypergraphs --Burrows-Wheeler transform of words defined by morphisms -- Stable Noncrossing Matchings -- On the Average Case of MergeInsertion --Shortest Unique Palindromic Substring Queries on Run-Length Encoded Strings -- A Partition Approach to Lower Bounds for Zero-Visibility Cops and Robber.

Sommario/riassunto

This book constitutes the refereed post-conference proceedings of the 30th International Workshop on Combinatorial Algorithms, IWOCA 2019, held in Pisa, Italy, in July 2019. The 36 regular papers presented in this volume were carefully reviewed and selected from 73 submissions. They cover diverse areas of combinatorical algorithms, complexity theory, graph theory and combinatorics, combinatorial optimization, cryptography and information security, algorithms on strings and graphs, graph drawing and labelling, computational algebra and geometry, computational biology, probabilistic and randomized algorithms, algorithms for big data analytics, and new paradigms of computation.