Record Nr. UNISA996465379803316 Parameterized and Exact Computation [[electronic resource]]: 8th **Titolo** International Symposium, IPEC 2013, Sophia Antipolis, France, September 4-6, 2013, Revised Selected Papers // edited by Gregory Gutin, Stefan Szeider Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2013 **ISBN** 3-319-03898-2 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (XII, 375 p. 28 illus.) Theoretical Computer Science and General Issues, , 2512-2029;; 8246 Collana Disciplina 519.544 Soggetti Algorithms Numerical analysis Computer science—Mathematics Discrete mathematics Artificial intelligence—Data processing **Numerical Analysis** Discrete Mathematics in Computer Science Data Science Mathematical Applications in Computer Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Exact Complexity and Satisfiability.- The Parameterized Complexity of Fixpoint Free Elements and Bases in Permutation Groups. - Parameterized Complexity of Two Edge Contraction Problems with Degree Constraints.- Declarative Dynamic Programming as an Alternative Realization of Courcelle's Theorem -- The Fine Details of Fast Dynamic Programming over Tree Decompositions.- On Subexponential and FPT-Time Inapproximability.- Multi-parameter Complexity Analysis for Constrained Size Graph Problems: Using Greediness for Parameterization.- Chain Minors Are FPT. - Incompressibility of H-Free Edge Modification.- Contracting Few Edges to Remove Forbidden Induced Subgraphs.- Fixed-Parameter and

Approximation Algorithms: A New Look. - Subgraphs Satisfying MSO

Properties on z-Topologically Orderable Digraphs.- Computing Tree-Depth Faster Than 2n.- Faster Exact Algorithms for Some Terminal Set Problems.- Parameterized Algorithms for Modular-Width.- A Faster FPT Algorithm for Bipartite Contraction.- On the Ordered List Subgraph Embedding Problems.- A Completeness Theory for Polynomial (Turing) Kernelization.- On Sparsification for Computing Treewidth.- The Jump Number Problem: Exact and Parameterized.- On the Hardness of Eliminating Small Induced Subgraphs by Contracting Edges.- Hardness of r-dominating set on Graphs of Diameter (r + 1).- Amalgam Width of Matroids.- On the Parameterized Complexity of Reconfiguration Problems.- FPT Algorithms for Consecutive Ones Submatrix Problems. - Upper Bounds on Boolean-Width with Applications to Exact Algorithms.- Speeding Up Dynamic Programming with Representative Sets: An Experimental Evaluation of Algorithms for Steiner Tree on Tree Decompositions.- Completeness Results for Parameterized Space Classes.- Treewidth and Pure Nash Equilibria -- Algorithms for k-Internal Out-Branching.

Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 8th International Symposium on Parameterized and Exact Computation, IPEC 2013, in Sophia Antipolis, France, in September 2013. The 29 revised full papers presented were carefully reviewed and selected from 58 submissions. The topics addressed cover research in all aspects of parameterized/exact algorithms and complexity including but are not limited to new techniques for the design and analysis of parameterized and exact algorithms, fixed-parameter tractability results, parameterized complexity theory, relationship between parameterized complexity and traditional complexity classifications, applications of parameterized and exact computation, and implementation issues of parameterized and exact algorithms.