Record Nr. UNINA9910410055403321 Beyond the Horizon of Computability: 16th Conference on **Titolo** Computability in Europe, CiE 2020, Fisciano, Italy, June 29-July 3, 2020. Proceedings / / edited by Marcella Anselmo, Gianluca Della Vedova, Florin Manea, Arno Pauly Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-51466-8 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (xxxvii, 378 pages) Collana Theoretical Computer Science and General Issues, , 2512-2029;; 12098 Disciplina 511.352 Computer science Soggetti Machine theory Algorithms Computer science—Mathematics Computer networks Artificial intelligence Theory of Computation Formal Languages and Automata Theory Mathematics of Computing Computer Communication Networks Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto A Note on Computable Embeddings for Ordinals and Their Reverses --Clockability for Ordinal Turing Machines -- Some notes on spaces of ideals and computable topology -- Parallelizations in Weihrauch reducibility and constructive reverse mathematics -- Liouville Numbers and the Computational Complexity of Changing Bases -- On Interpretability between some weak essential undecidable theories --On the Complexity of Conversion between Classic Real Number Representations -- Deterministic and Nondeterministic Iterated

Uniform Finite-State Transducers: Computational and Descriptional

Power -- Computable analysis and classification problems -- Noncoding enumeration operators -- On the Interplay Between Inductive Inference of Recursive Functions, Complexity Theory and Recursive Numberings -- An interactive proof system for Program extraction --ASNP: a tame fragment of existential second-order logic --Ackermannian Goodstein sequences of intermediate growth -- On the complexity of validity degrees in ukasiewicz logic -- Degrees of noncomputability of homeomorphism types of Polish spaces -- Timeaware uniformization of winning strategies -- Quantitative Representation Theory of Compact Metric Spaces -- Functions of Baire class one over a Bishop topology -- Combinatorial properties of degree sequences of 3-uniform hypergraphs arising from saind sequences --The Computational Significance of Hausdorff's Maximal Chain Principle -- Prefix of trace languages: clique polynomials and dependency graphs -- Repetitions in Toeplitz words and the Thue threshold --Simulation of automata networks -- Theoretical and Implementation Aspects of the Formal Language Server (LaSer) -- Balancing Straight-Line Programs for Strings and Trees -- Two-dimensional codes --Formal Languages in Graph Databases and Information Extraction --On the perceptron's compression -- #P-completeness of counting update digraphs, cacti, and series-parallel decomposition method --Faster Online Computation of the Succinct Longest Previous Factor Array -- Recent advances in text-to-pattern distance algorithms --Insertion-Deletion Systems With Substitutions: The Context-free Case.

Sommario/riassunto

This book constitutes the proceedings of the 16th Conference on Computability in Europe, CiE 2020, which was planned to be held in Fisciano, Italy, during June 29 until July 3, 2020. The conference moved to a virtual format due to the coronavirus pandemic. The 30 full and 5 short papers presented in this volume were carefully reviewed and selected from 72 submissions. CiE promotes the development of computability-related science, ranging over mathematics, computer science and applications in various natural and engineering sciences, such as physics and biology, as well as related fields, such as philosophy and history of computing. CiE 2020 had as its motto Beyond the Horizon of Computability, reflecting the interest of CiE in research transgressing the traditional boundaries of computability theory.