Record Nr. UNISA996465720703316 Automata, Languages and Programming [[electronic resource]]: 16th **Titolo** International Colloquium, Stresa, Italy, July 11-15, 1989. Proceedings / / edited by Giorgio Ausiello, Mariangiola Dezani-Ciancaglini, Simonetta Ronchi Della Rocca Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1989 **ISBN** 3-540-46201-5 Edizione [1st ed. 1989.] Descrizione fisica 1 online resource (XIV, 790 p.) Collana Lecture Notes in Computer Science, , 0302-9743;; 372 Disciplina 004.0151 Soggetti Computers Computer logic **Algorithms** Mathematical logic Combinatorics Theory of Computation Logics and Meanings of Programs Algorithm Analysis and Problem Complexity Mathematical Logic and Formal Languages Computation by Abstract Devices Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Realizable and unrealizable specifications of reactive systems --Limitations of the upward separation technique (preliminary version) --Lower bounds for the low hierarchy -- Efficient text searching of regular expressions -- Factors of words -- Asymptotically optimal distributed consensus -- Time lower bounds for CREW-PRAM computation of monotone functions -- Subduing self-application --

Everything in NP can be argued in perfect zero-knowledge in a bounded number of rounds -- Polymorphic rewriting conserves algebraic strong normalization and confluence -- Completion of finite

codes with finite deciphering delay -- Relational semantics for recursive types and bounded quantification -- A singly-exponential

stratification scheme for real semi-algebraic varieties and its applications -- About primitive recursive algorithms -- The definability of equational graphs in monadic second-order logic -- Dominoes and the regularity of DNA splicing languages -- Causal trees -- Infinite normal forms -- On recent trends in algebraic specification --Automata with storage on infinite words -- Parallel algorithmic techniques for combinatorial computation -- On dice and coins: models of computation for random generation -- An optimal probabilistic algorithm for synchronous Byzantine agreement --Finding triconnected components by local replacements -- An improved algorithm for approximate string matching -- A pointer-free data structure for merging heaps and min-max heaps -- Structured operational semantics and bisimulation as a congruence -- Parallel retrieval of scattered information -- Tensor rank is NP-complete --The complexity of nonlinear separable optimization -- General methods for the analysis of the maximum size of dynamic data structures -- How to share concurrent asynchronous wait-free variables -- A new approach to formal language theory by kolmogorov complexity -- Dynamic algorithms in D.E. Knuth's model: A probabilistic analysis -- Completing the temporal picture -- Lower bounds for computations with the floor operation -- Programming. transforming, and proving with function abstractions and memories --Automata theory meets circuit complexity -- Two versus one index register and modifiable versus non-modifiable programs -- Shortest paths without a map -- Modular system design applying graph grammars techniques -- Partial communations -- On the synthesis of an asynchronous reactive module -- The complexity of controlled selection -- Memory versus randomization in on-line algorithms --Syntactic control of interference Part 2 -- Characteristic formulae -- A combinatorial technique for separating counting complexity classes --Horn programs and semicomputable relations on abstract structures --A note on model checking the modal v-calculus -- DI-domains as information systems.

Sommario/riassunto

This volume contains the proceedings of ICALP 89, held at Stresa, Italy, July 11-15, 1989. ICALP 89 is the 16th International Colloquium on Automata, Languages and Programming in a series of meetings sponsored by the European Association for Theoretical Computer Science (EATCS). It is a broadly based conference covering all aspects of theoretical computer science including topics such as computability, automata theory, formal language theory, analysis of algorithms, computational complexity, mathematical aspects of programming language definition, logic and semantics of programming languages, foundations of logic programming, theorem proving, software specification, computational geometry, data types and data structures, theory of data bases and knowledge based systems, cryptography, VLSI structures, parallel and distributed computing, models of concurrency and robotics.