Record Nr. UNISA996466136503316 Automata, Languages and Programming [[electronic resource]]: 20th **Titolo** International Colloquium, ICALP 93, Lund, Sweden, July 5-9, 1993. Proceedings / / edited by Andrzej Lingas, Rolf Karlsson, Svante Carlsson Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1993 **ISBN** 3-540-47826-4 Edizione [1st ed. 1993.] Descrizione fisica 1 online resource (XIII, 703 p.) Lecture Notes in Computer Science, , 0302-9743;; 700 Collana Disciplina 004.0151 Soggetti Computers Algorithms Computer logic Mathematical logic Computer programming Theory of Computation Computation by Abstract Devices Algorithm Analysis and Problem Complexity Logics and Meanings of Programs Mathematical Logic and Formal Languages **Programming Techniques** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Program result checking: A new approach to making programs more reliable -- Dynamic interpolation search in o(log log n) time --Searching among intervals and compact routing tables -- The approximation of maximum subgraph problems -- Polynomially bounded minimization problems which are hard to approximate --Primal-dual approximation algorithms for integral flow and multicut in trees, with applications to matching and set cover -- The complexity of approximating PSPACE-complete problems for hierarchical specifications -- Problems on pairs of trees and the four colour

problem of planar graphs -- Constructing competitive tours from local

information -- Treewidth and pathwidth of permutation graphs -- A theory of even functionals and their algorithmic applications -- Exact asymptotics of divide-and-conquer recurrences -- Optimal bounds for the change-making problem -- The complexity of N-body simulation -- A simple method for resolving degeneracies in Delaunay triangulations -- Fault-tolerance and complexity (Extended abstract) --Reversal-space trade-offs for simultaneous resource-bounded nondeterministic Turing machines -- On the computational power of discrete Hopfield nets -- On randomized versus deterministic computation -- Lower bounds for one-way probabilistic communication complexity -- Maintaining discrete probability distributions optimally -- Secure and efficient off-line digital money (extended abstract) -- Computational depth and reducibility --Learnability: Admissible, co-finite, and hypersimple languages --Inclusion is undecidable for pattern languages -- New decidability results concerning two-way counter machines and applications --Cobham's Theorem seen through Büchi's Theorem -- Logical definability on infinite traces -- Algebras for classifying regular tree languages and an application to frontier testability -- Finite automata as characterizations of minor closed tree families (extended abstract) -- On distributed algorithms in a broadcast domain -- Sparse networks supporting efficient reliable broadcasting -- Strongly adaptive token distribution -- Fast parallel computation of characteristic polynomials by Leverrier's power sum method adapted to fields of finite characteristic -- Fast parallel constraint satisfaction -- The product of rational languages -- On regular compatibility of semi-commutations -- Algebraic aspects of B-regular series -- Products of finite state machines with full coverage -- An effective version of Stallings' theorem in the case of context-free groups -- On the power of periodic iteration of morphisms -- If a DOL language is k-power free then it is circular -- Deciding true concurrency equivalences on finite safe nets (preliminary report) -- Timed testing of concurrent systems -- The fork calculus -- Extended transition systems for parametric bisimulation --Temporal logic and categories of Petri nets -- Decidability of a partial order based temporal logic -- Local model checking for context-free processes -- Computing on structures -- A partial solution for Dunification based on a reduction to AC 1-unification -- Efficient analysis of concurrent constraint logic programs -- A confluent reduction for the extensional typed ?-calculus with pairs, sums, recursion and terminal object -- Modularity of termination and confluence in combinations of rewrite systems with ?? -- From domains to automata with concurrency -- What is a universal higher-order programming language?.

Sommario/riassunto

The International Colloquium on Automata, Languages and Programming (ICALP) is an annual conference series sponsored by the European Association for Theoretical Computer Science (EATCS). It is intended to cover all important areas of theoretical computer science, such as: computability, automata,formal languages, term rewriting, analysis of algorithms, computational geometry, computational complexity, symbolic and algebraic computation, cryptography, data types and data structures, theory of data bases and knowledge bases, semantics of programming languages, program specification, transformation and verification, foundations of logicprogramming, theory of logical design and layout, parallel and distributed computation, theory of concurrency, and theory of robotics. This volume contains the proceedings of ICALP 93, held at LundUniversity, Sweden, in July 1993. It includes five invited papers and 51 contributed papers selected from 151 submissions.