Record Nr. UNISA996465613103316 STACS 90 [[electronic resource]]: 7th Annual Symposium on **Titolo** Theoretical Aspects of Computer Science. Rouen, France, February 22-24, 1990. Proceedings / / edited by Christian Choffrut, Thomas Lengauer Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1990 **ISBN** 3-540-46945-1 Edizione [1st ed. 1990.] Descrizione fisica 1 online resource (X, 318 p.) Lecture Notes in Computer Science, , 0302-9743;; 415 Collana Disciplina 004 Soggetti Computers Algorithms Computer logic Mathematical logic Theory of Computation Computation by Abstract Devices Algorithm Analysis and Problem Complexity Logics and Meanings of Programs Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto A note on the almost-everywhere hierarchy for nondeterministic time -- The ring of k-regular sequences -- Minimal pairs and complete problems -- Hiding instances in multioracle queries -- Counting classes: Thresholds, parity, mods, and fewness -- Playing games of incomplete information -- Caterpillars and context-free languages --Semi-commutations and algebraic languages -- Towards a process semantics in the logic programming style -- Parallel computations on strings and arrays -- Minimum vertex hulls for polyhedral domains --Combinatorial rewriting on traces -- Kolmogorov complexity, restricted nondeterminism and generalized spectra -- Relation-sorted algebraic

specifications with built-in coercers: Basic notions and results -- Computational power of one-way multihead finite automata --

Updating almost complete trees or one level makes all the difference -Sorting the sums (xi+yj) in O(n2) comparisons -- Efficient checking of
computations -- Hard promise problems and nonuniform complexity
-- On the construction of abstract voronoi diagrams -- Approximation
of convex figures by pairs of rectangles -- Nonblocking graphs: Greedy
algorithms to compute disjoint paths -- Infinite trees and automaton
definable relations over ?-words -- Enumerative Combinatorics and
Computer Science -- Failures semantics based on interval semiwords is
a congruence for refinement -- The analysis of local search problems
and their heuristics.

## Sommario/riassunto

The Symposium on Theoretical Aspects of Computer Science is organized jointly by the Special Interest Group for Applied Mathematics of AFCET (Association Française de Cybernétique Economique et Technique) and the Special Interest Group for Theoretical Computer Sciences of GI (Gesellschaft für Informatik). It is held alternately in France and in Germany. This volume contains two invited papers, on combinatorial methods in computer science, and on the complexity of local optimization, and 24 contributions on theoretical aspects of computer science. Some software systems are presented showing the possibilities of applying theoretical research to the realization of software tools.