1. Record Nr. UNISA996465880203316 Mathematical Foundations of Computer Science 1993 [[electronic **Titolo** resource]]: 18th International Symposium, MFCS'93, Gdask, Poland, August 30-September 3, 1993 Proceedings / / edited by Andrzej M. Borzyszkowski, Stefan Sokolowski Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1993 **ISBN** 3-540-47927-9 Edizione [1st ed. 1993.] Descrizione fisica 1 online resource (XIII, 786 p.) Lecture Notes in Computer Science, , 0302-9743;; 711 Collana Disciplina 519 Soggetti Applied mathematics **Engineering mathematics** Software engineering Computers Algorithms Computer logic Applications of Mathematics Software Engineering/Programming and Operating Systems Theory of Computation Computation by Abstract Devices Algorithm Analysis and Problem Complexity Logics and Meanings of Programs Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto On the unification free prolog programs -- Equivalences and preorders of transition systems -- Deliverables: a categorical approach to program development in type theory -- Complex and complex-like traces -- Symbolic bisimulations (abstract) -- Some results on the full abstraction problem for restricted lambda calculi -- Action calculi, or syntactic action structures -- Observable properties of higher order

functions that dynamically create local names, or: What's new? -- The second calculus of binary relations -- An introduction to dynamic

labeled 2-structures -- Post Correspondence Problem: Primitivity and interrelations with complexity classes -- A taste of linear logic -- On the tree inclusion problem -- On the adequacy of per models --Hausdorff reductions to sparse sets and to sets of high information content -- Stores as homomorphisms and their transformations --Comparative semantics for linear arrays of communicating processes -- Rabin tree automata and finite monoids -- Efficient type reconstruction in the presence of inheritance -- A characterization of Sturmian morphisms -- On the complexity of scheduling incompatible jobs with unit-times -- Isomorphisms between predicate and state transformers -- On the amount of nondeterminism and the power of verifying -- Observing distribution in processes -- Speedup of recognizable trace languages -- May I borrow your logic? --Approximate and exact deterministic parallel selection -- Defining soft sortedness by abstract interpretation -- A model for real-time process algebras (extended abstract) -- Data encapsulation and modularity: Three views of inheritance -- Image compression using Weighted Finite Automata -- Filter models for a parallel and non deterministic ?calculus -- Real number computability and domain theory -- Lambda substitution algebras -- Global properties of 2D cellular automata: some complexity results -- Completeness results for linear logic on Petri nets -- An expressive logic for Basic Process Algebra -- The complexity of finding replicas using equality tests -- A complete axiomatization for branching bisimulation congruence of finite-state behaviours -- Object Oriented application flow graphs and their semantics -- Some hierarchies for the communication complexity measures of cooperating grammar systems -- Efficient parallel graph algorithms based on open ear decomposition -- On the communication complexity of parallel computation -- A taxonomy of forgetting automata -- Hybrid parallel programming and implementation of synchronised communication -- Proof systems for cause based equivalences -- A uniform universal CREW PRAM -- Observing located concurrency -- The boundary of substitution systems -- New algorithms for detecting morphic images of a word -- Ignoring nonessential interleavings in assertional reasoning on concurrent programs -- Constant time reductions in ?-calculus -- Heterogeneous unified algebras -- A representation theorem for lambda abstraction algebras -- On saturated calculi for a linear temporal logic -- The snack powerdomain for database semantics -- Verifying properties of module construction in type theory -- On time-space trade-offs in dynamic graph pebbling -- Deterministic behavioural models for concurrency -- Real-time refinement: Semantics and application --Deciding testing equivalence for real-time processes with dense time -- A calculus for higher order procedures with global variables --Variable substitution with iconic combinators -- Feature constraints with first-class features -- Between Min Cut and Graph Bisection --Paths and cycles in finite periodic graphs -- Learning decision lists from noisy examples -- Analytic tableaux for finite and infinite Post logics.

Sommario/riassunto

This volume contains the proceedings of the 18th International Symposium on Mathematical Foundations of Computer Science, MFCS '93, held in Gdansk, Poland, August-September 1993. The MFCS symposia, organized annually in Poland and the former Czechoslovakia since 1972, have a long and well-established tradition. Over the years they have served as a meeting ground for specialists from all branches of theoretical computer science, in particular - algorithms and complexity, automata theory and theory of languages, - concurrent, distributed and real-time systems, - the theory of functional, logic and

object-oriented programming, - lambda calculus and type theory, - semantics and logics of programs, and others. The volume contains 12 invitedlectures and 56 contributed papers selected from 133 submissions.