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| Disciplina | 005.3 |
| Soggetti | Algorithms<br>Computer science—Mathematics<br>Computers, Special purpose<br>Computer systems<br>Logic design<br>Computer science<br>Mathematics of Computing<br>Special Purpose and Application-Based Systems<br>Computer System Implementation<br>Logic Design<br>Computer Science Logic and Foundations of Programming |
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| Nota di contenuto | Proof-of-Work Certificates that Can Be Efficiently Computed in the Cloud (Invited Talk) -- On Unimodular Matrices of Difference Operators -- Sparse Polynomial Arithmetic with the BPAS Library -- Computation of Pommaret Bases Using Syzygies -- A Strongly Consistent Finite Difference Scheme for Steady Stokes Flow and its Modified Equations -- Symbolic-Numeric Methods for Nonlinear Integro-Differential Modeling -- A Continuation Method for Visualizing Planar Real Algebraic Curves with Singularities -- From Exponential Analysis to Padé Approximation and Tensor Decomposition, in One and More Dimensions -- Symbolic |

Algorithm for Generating the Orthonormal Bargmann-Moshinsky Basis for SU(3) Group -- About Some Drinfel'd Associators -- On a Polytime Factorization Algorithm for Multilinear Polynomials over F2 -- Tropical Newton-Puiseux Polynomials -- Orthogonal Tropical Linear Prevarieties -- Symbolic-Numerical Algorithms for Solving Elliptic Boundary-Value Problems Using Multivariate Simplex Lagrange Elements -- Symbolic-Numeric Simulation of Satellite Dynamics with Aerodynamic Attitude Control System -- Finding Multiple Solutions in Nonlinear Integer Programming with Algebraic Test-Sets -- Positive Solutions of Systems of Signed Parametric Polynomial Inequalities -- Qualitative Analysis of a Dynamical System with Irrational First Integrals -- Effective Localization Using Double Ideal Quotient and Its Implementation -- A Purely Functional Computer Algebra System Embedded in Haskell -- Splitting Permutation Representations of Finite Groups by Polynomial Algebra Methods -- Factoring Multivariate Polynomials with Many Factors and Huge Coefficients -- Beyond the First Class of Analytic Complexity -- A Theory and an Algorithm for Computing Sparse Multivariate Polynomial Remainder Sequence -- A Blackbox Polynomial System Solver on Parallel Shared Memory Computers.

Sommario/riassunto