

1. Record Nr.	UNINA9910349411103321
Titolo	Computer Algebra in Scientific Computing : 20th International Workshop, CASC 2018, Lille, France, September 17–21, 2018, Proceedings // edited by Vladimir P. Gerdt, Wolfram Koepf, Werner M. Seiler, Evgenii V. Vorozhtsov
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	9783319996394 3319996398
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIII, 379 p. 54 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 11077
Disciplina	005.3
Soggetti	Algorithms Computer science - Mathematics Computers, Special purpose Computer systems Logic design Computer science Mathematics of Computing Special Purpose and Application-Based Systems Computer System Implementation Logic Design Computer Science Logic and Foundations of Programming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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 Polytyme 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

Chapter “Positive Solutions of Systems of Signed Parametric Polynomial Inequalities” is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.
