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Electronic States in Quantum Dots -- Cayley-Dixon Resultant Matrices of Multi-univariate Composed Polynomials -- A Descartes Algorithm for Polynomials with Bit-Stream Coefficients -- Real Solving of Bivariate Polynomial Systems -- Nouvelle Cuisine for the Computation of the Annihilating Ideal of f s -- Janet-Like Monomial Division -- Janet-Like Gröbner Bases -- Circulant Digraphs and Monomial Ideals -- Algebraic Topological Analysis of Time-Sequence of Digital Images -- Hilbert Stratification and Parametric Gröbner Bases -- Investigation of the Stability Problem for the Critical Cases of the Newtonian Many-Body Problem -- Symbolic-Numerical Algorithm for Solving the Time-Dependent Schrödinger Equation by Split-Operator Method -- On Some Results of Investigation of Kirchhoff Equations in Case of a Rigid Body Motion in Fluid -- On Compatibility of Discrete Relations -- Construction of Two Level Orthogonal Arrays Via Solutions of Linear Systems -- Counting Techniques Specifying the Existence of Submatrices in Weighing Matrices -- Fast Verification for Respective Eigenvaluesof Symmetric Matrix -- Towards More Accurate Separation Bounds of Empirical Polynomials II -- Compiler-Enforced Memory Semantics in the SACLIB Computer Algebra Library -- Meta-Petro: An Expert System for Training Undergraduates in Metamorphic Rocks Recognition and Classification Using Photomicrographies -- The Diamond Operator – Implementation of Exact Real Algebraic Numbers -- Constructing the Numerical Method for Navier — Stokes Equations Using Computer Algebra System -- Nonlinear Waves in a Rod -- A Symbolic-Numeric Method for Solving Boundary Value Problems of Kirchhoff Rods -- Differential and Difference Equations for Products of Classical Orthogonal Polynomials -- Algorithm of Local Resolution of Singularities of a Space Curve -- Quantifier Elimination for Constraint Logic Programming -- Computation of Full Comprehensive Gröbner Bases -- Recursive Polynomial Remainder Sequence and the Nested Subresultants -- Interdependence Between the Laurent-Series and Elliptic Solutions of Nonintegrable Systems -- Solving Linear Differential Problems with Parameters -- Approximate Solution of the Dirichlet Problem for Elliptic PDE and Its Error Estimate.