

1. Record Nr.	UNISA996466351603316
Titolo	Computer Algebra [[electronic resource]] : EUROCAM '82, European Computer Algebra Conference, Marseilles, France, April 5-7, 1982 // edited by J. Calmet
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1982
ISBN	3-540-39433-8
Edizione	[1st ed. 1982.]
Descrizione fisica	1 online resource (XVI, 304 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 144
Disciplina	518
Soggetti	Numerical analysis Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Asymptotically fast algorithms for the numerical multiplication and division of polynomials with complex coefficients -- An adaptive hybrid algorithm for multiplying dense polynomials -- The construction of multivariate polynomials with preassigned zeros -- Lattices and factorization of polynomials over algebraic number fields -- Commutative algebra and computer algebra -- The nielsen reduction as key problem to polynomial algorithms in free groups -- The structure of near-rings of small order -- Computing double coset representatives for the generation of solvable groups -- On the determination of algebraic number fields of given discriminant -- Rewrite rule theory and abstract data type analysis -- Algebraic specifications: A constructive methodology in logic programming -- A theorem-proving approach to the Knuth-Bendix completion algorithm -- Solving symbolic equations with press -- Deterministic versus probabilistic factorization of integral polynomials -- On polynomial factorization -- Hacıjan's algorithm in VAXIMA: improvements and difficulties -- The parallel Risch algorithm (I) -- An algorithm to compute the equations of tangent cones -- Computer algebra systems viewed by a notorious user -- Implementation of differential geometric objects and functions with an application to extended Maxwell equations -- A sum-substitutor used as trigonometric simplifier --

Transformation of an intractable problem into a tractable problem:
Evaluation of a determinant in several variables -- Algebraic
computation of the solution of some nonlinear differential equations --
Factorization in cylindrical algebraic decomposition — Abstract --
Cylindrical algebraic decomposition by quantifier elimination --
Algorithms for the computation of free lattices -- Linear algebraic
approach for computing polynomial resultant -- The development of a
vector-based algebra system -- Nlargeing a z80 microprocessor --
Escaping from intermediate expression swell: a continuing saga --
REDUCE — A case study in algebra system development -- An
algorithm to obtain formal solutions of a linear homogeneous
differential equation at an irregular singular point -- Symbolic numeric
methods in microwave technology -- A program in REDUCE for finding
explicit solutions to certain ordinary differential equations -- An
application of MACSYMA to nonlinear systems decoupling.
