CENTRO DE MEDIOS
BIBLIOTECA

Table of Contents

897

Adleman, L. M. and Huang, M.-D.
Counting Rational Points on Curves and Abelian Varieties over Finite Fields 1

Belabas, K.
Computing Cubic Fields in Quasi-Linear Time 17

Bernstein, D. J.
Fast Ideal Arithmetic via Lazy Localization 27

Brent, R. P., van der Poorten, A. J. and te Riele, H. J.
A Comparative Study of Algorithms for Computing Continued Fractions of Algebraic Numbers 35

Cohen, H., Diaz y Diaz, F. and Olivier, M.
Computing Ray Class Groups, Conductors and Discriminants 49

Couveignes, J.-M.
Computing l-Isogenies Using the p-Torsion 59

Daberkow, M. and Pohst, M. E.
On Computing Hilbert Class Fields of Prime Degree 67

Denny, T. F. and Müller, V.
On the Reduction of Composed Relations from the Number Field Sieve 75

Dummit, D. S. and Hayes, D. R.
Checking the $\mathfrak{p}$*-adic Stark Conjecture When* $\mathfrak{p}$ *Is Archimedean* 91

Elkenbracht-Huizing, M.
A Multiple Polynomial General Number Field Sieve 99

Fermigier, S.
Construction of High-Rank Elliptic Curves over $\mathbb{Q}$ *and* $\mathbb{Q}(t)$ *with Non-Trivial 2-Torsion* 115

ní Fhlathúin, B.
The Height on an Abelian Variety 121

Fieker, C. and Pohst, M. E.
On Lattices over Number Fields 133

Ford, D.
Minimum Discriminants of Primitive Sextic Fields 141

Ford, D. and Havas, G.
A New Algorithm and Refined Bounds for Extended Gcd Computation .. 145

Gaál, I.
Application of Thue Equations to Computing Power Integral Bases in Algebraic Number Fields 151

Gebel, J., Pethö, A. and Zimmer, H. G.
Computing S-Integral Points on Elliptic Curves 157

Giesbrecht, M.
Probabilistic Computation of the Smith Normal Form of a Sparse Integer Matrix 173

Lauter, K.
Ray Class Field Constructions of Curves over Finite Fields with Many Rational Points 187

Lercier, R.
Computing Isogenies in $\mathbb{F}_{2^n}$ 197

Louboutin, S.
A Computational Technique for Determining Relative Class Numbers of CM-Fields 213

McKee, J. and Pinch, R.
Old and New Deterministic Factoring Algorithms 217

Meyer, S. M. and Sorenson, J. P.
Efficient Algorithms for Computing the Jacobi Symbol 225

Niklasch, G.
The Number Field Database on the World Wide Web Server 241

Paulus, S.
An Algorithm of Subexponential Type Computing the Class Group of Quadratic Orders over Principal Ideal Domains 243

Pohst, M. E. (Invited talk)
Computational Aspects of Kummer Theory 259

Pohst, M. E. and Schörnig, M.
On Integral Basis Reduction in Global Function Fields 273

Poonen, B. (Invited talk)
Computational Aspects of Curves of Genus at Least 2 283

Rössner, C. and Seifert, J.-P.
The Complexity of Approximate Optima for Greatest Common Divisor Computations 307

Scheidler, R.
Compact Representation in Real Quadratic Congruence Function Fields 323

Schirokauer, O., Weber, D. and Denny, T. (Invited talk)
Discrete Logarithms: The Effectiveness of the Index Calculus Method 337

Smart, N.
How Difficult Is It to Solve a Thue Equation? 363

Stein, A.
Elliptic Congruence Function Fields 375

Tsfasman, M. (Invited talk)
Algebraic Geometry Lattices and Codes 385

Weber, D.
Computing Discrete Logarithms with the General Number Field Sieve 391

Author Index 405