

Contents

Introduction	ix
Classification of 2-Fano manifolds with high index CAROLINA ARAUJO AND ANA-MARIA CASTRAVET	1
Abelian varieties associated to Gaussian lattices ARNAUD BEAUVILLE	37
Rank of divisors on graphs: An algebro-geometric analysis LUCIA CAPORASO	45
A tour of stable reduction with applications SEBASTIAN CASALAINA-MARTIN	65
The solvable monodromy extension property and varieties of log general type SABIN CAUTIS	119
Effective divisors of moduli spaces of curves and abelian varieties DAWEI CHEN, GAVRIL FARKAS, AND IAN MORRISON	131
Rational self maps of Calabi-Yau manifolds XI CHEN	171
Variations on Nagata's conjecture CIRO CILIBERTO, BRIAN HARBOURNE, RICK MIRANDA, AND JOAQUIM ROÉ	185
Symplectic restriction varieties and geometric branching rules IZZET COSKUN	205
Riemann-Roch for Deligne-Mumford stacks DAN EDIDIN	241
The regularity of the conductor DAVID EISENBUD AND BERND ULRICH	267
Stability of genus five canonical curves MAKSYM FEDORCHUK AND DAVID ISHII SMYTH	281
Restriction of sections for families of abelian varieties TOM GRABER AND JASON MICHAEL STARR	311
Correspondence and cycles spaces: A result comparing their cohomologies MARK GREEN AND PHILLIP GRIFFITHS	329

Geometry of theta divisors—a survey SAMUEL GRUSHEVSKY AND KLAUS HULEK	361
Singular curves and their compactified Jacobians JESSE LEO KASS	391
On the Göttsche threshold STEVEN L. KLEIMAN AND VIVEK V. SHENDE, WITH AN APPENDIX BY ILYA TYOMKIN	429
Curve counting à la Göttsche STEVEN L. KLEIMAN	451
Mnev-Sturmfels universality for schemes SEOK HYEONG LEE AND RAVI VAKIL	457
Gromov-Witten theory and Noether-Lefschetz theory DAVESH MAULIK AND RAHUL PANDHARIPANDE	469
Numerical Macaulification JUAN MIGLIORE AND UWE NAGEL	509
The non-nef locus in positive characteristic MIRCEA MUSTAȚĂ	535
Pairwise incident planes and hyperkähler four-folds KIERAN G. O'GRADY	553
Derived equivalence and non-vanishing loci MIHNEA POPA	567
Degenerations of rationally connected varieties and PAC fields JASON STARR	577
Remarks on curve classes on rationally connected varieties CLAIRE VOISIN	591