

CONTENTS

S. S. ABHYANKAR: Resolution of Singularities of Algebraic Surfaces	1
M. ARTIN: The Implicit Function Theorem in Algebraic Geometry	13
B. J. BIRCH: Diophantine Analysis and Modular Functions	35
A. BOREL: On the Automorphisms of Certain Subgroups of Semi-Simple Lie Groups	43
A. BOREL and J. TITS: On "Abstract" Homomorphisms of Simple Algebraic Groups	75
J. W. S. CASSELS: Rational Points on Curves of Higher Genus	83
B. DWORK: A Deformation Theory for Singular Hypersurfaces	85
P. A. GRIFFITHS: Some Results on Algebraic Cycles on Algebraic Manifolds	93
A. GROTHENDIECK: Standard Conjectures on Algebraic Cycles	193
H. HIRONAKA: Formal Line Bundles along Exceptional Loci	201
F. HIRZEBRUCH and K. JÄNICH: Involutions and Singularities	219
J.-I. IGUSA: Geometric and Analytic Methods in the Theory of Theta-Functions	241
Yu. I. MANIN: On Some Groups Related to Cubic Hypersurfaces	255
T. MATSUSAKA: On Canonically Polarized Varieties	265

D. MUMFORD: Bi-Extensions of Formal Groups	307
M. NAGATA: Some Questions on Rational Actions of Groups	323
M. S. NARASIMHAN and S. RAMANAN: Vector Bundles on Curves	335
C. S. SESHADEVI: Mumford's Conjecture for $GL(2)$ and Applications	347
T. A. SPRINGER: The Unipotent Variety of a Semi-Simple Group	373
J.-L. VERDIER: Base Change for Twisted Inverse Image of Coherent Sheaves	393
A. WEIL: Zeta-Functions and Mellin Transforms	409