CONTENTS

Winfried BRUNS and Joseph GUBELADZE — Polyhedral Algebras, Arrangements of Toric Varieties, and their Groups 1

Art M. DUVAL — Algebraic Shifting and Spectral Sequences 53

Vesselin GASHAROV, Irena PEEVA and Volkmar WELKER — Coordinate Subspace Arrangements and Monomial Ideals 65

Jürgen HERZOG — Generic Initial Ideals and Graded Betti Numbers 75

Gil KALAI — Algebraic Shifting 121

Kayo MASUDA — Certain Moduli of Algebraic G-vector Bundles over Affine G-varieties 165

Masayoshi MIYANISHI — Completely Parametrized $\mathbb{A}^1$-fibrations on the Affine Plane 185

Marko PETKOVŠEK, James POMMERSHEIM and Irena SWANSON — The Zarankiewicz Problem via Chow Forms 203

Claudio PROCESI — Notes on the Topology of Hyperplane Arrangements and Braid Groups 213

Vasudevan SRINIVAS — Some Geometric Methods in Commutative Algebra 231