

Contents

Antonio Campillo	1
Francisco Monserrat and Sebastià Xambó-Descamps	
Singularities in Positive Characteristic: Equisingularity, Classification, Determinacy	37
Gert-Martin Greuel	
Ultrametric Spaces of Branches on Arborescent Singularities	55
Evelia R. García Barroso, Pedro D. González Pérez, and Patrick Popescu-Pampu	
Two Points of the Boundary of Toric Geometry	107
Bernard Teissier	
On the Milnor Formula in Arbitrary Characteristic	119
Evelia R. García Barroso and Arkadiusz Płoski	
Foliations in the Plane Uniquely Determined by Minimal Subschemes of its Singularities	135
Jorge Olivares	
Newton Transformations and the Motivic Milnor Fiber of a Plane Curve	145
Pierrette Cassou-Noguès and Michel Raibaut	
Nash Modification on Toric Curves	191
Daniel Duarte and Daniel Green Tripp	
A Recursive Formula for the Motivic Milnor Fiber of a Plane Curve	203
Manuel González Villa, Gary Kennedy, and Lee J. McEwan	
On Hasse–Schmidt Derivations: The Action of Substitution Maps	219
Luis Narváez Macarro	
An Introduction to Resolution of Singularities via the Multiplicity	263
Diego Sulca and Orlando Villamayor U.	

Platonic Surfaces	319
Brenda Leticia De La Rosa-Navarro, Gioia Failla, Juan Bosco Frías-Medina, Mustapha Lahyane, and Rosanna Utano	
Coverings of Rational Ruled Normal Surfaces	343
Enrique Artal Bartolo, José Ignacio Cogolludo-Agustín, and Jorge Martín-Morales	
Ulrich Bundles on Veronese Surfaces	375
Laura Costa and Rosa Maria Miró-Roig	
Multiple Structures on Smooth on Singular Varieties	383
M. R. Gonzalez-Dorrego	
Smoothness in Some Varieties with Dihedral Symmetry and the DFT Matrix	391
Santiago López de Medrano	
The Greedy Algorithm and the Cohen-Macaulay Property of Rings, Graphs and Toric Projective Curves	411
Argimiro Arratia	
Binomial Ideals and Congruences on $\mathbb{N}^n$	429
Laura Felicia Matusevich and Ignacio Ojeda	
The K-Theory of Toric Schemes Over Regular Rings of Mixed Characteristic	455
G. Cortiñas, C. Haesemeyer, M. E. Walker, and C. A. Weibel	
On Finite and Nonfinite Generation of Associated Graded Rings of Abhyankar Valuations	481
Steven Dale Cutkosky	
Symbolic Powers of Monomial Ideals and Cohen-Macaulay Vertex-Weighted Digraphs	491
Philippe Gimenez, José Martínez-Bernal, Aron Simis, Rafael H. Villarreal, and Carlos E. Vivares	
Asymptotics of Reduced Algebraic Curves Over Finite Fields	511
J. I. Farrán	
The Poincaré Polynomial of a Linear Code	525
Carlos Galindo, Fernando Hernando, Francisco Monserrat, and Ruud Pellikaan	
The Metric Structure of Linear Codes	537
Diego Ruano	
On Some Properties of A Inherited by $C_b(X, A)$	563
Alejandra García, Lourdes Palacios, and Carlos Signoret	

A Fractional Partial Differential Equation for Theta Functions..... 579
Rafael G. Campos

On Continued Fractions..... 593
Gerardo Gonzalez Sprinberg