

Table of contents for Volume 1

Preface	ix
Contributors	xiii
Model theory and stability theory, with applications in differential algebra and algebraic geometry <i>Anand Pillay</i>	1
Differential algebra and generalizations of Grothendieck’s conjecture on the arithmetic of linear differential equations <i>Anand Pillay</i>	25
Schanuel’s conjecture for non-isoconstant elliptic curves over function fields <i>Daniel Bertrand</i>	41
An afterthought on the generalized Mordell-Lang conjecture <i>Damian Rössler</i>	63
On the definitions of difference Galois groups <i>Zoé Chatzidakis, Charlotte Hardouin and Michael F. Singer</i>	73
Differentially valued fields are not differentially closed <i>Thomas Scanlon</i>	111
Complex analytic geometry in a nonstandard setting <i>Ya’acov Peterzil and Sergei Starchenko</i>	117
Model theory and Kähler geometry <i>Rahim Moosa and Anand Pillay</i>	167
	v

vi	
Some local definability theory for holomorphic functions	197
<i>A.J. Wilkie</i>	
Some observations about the real and imaginary parts of complex Pfaffian functions	215
<i>Angus Macintyre</i>	
Fusion of structures of finite Morley rank	225
<i>Martin Ziegler</i>	
Establishing the o-minimality for expansions of the real field	249
<i>Jean-Philippe Rolin</i>	
On the tomography theorem by P. Schapira	283
<i>Sergei Starchenko</i>	
A class of quantum Zariski geometries	293
<i>Boris Zilber</i>	
Model theory guidance in number theory?	327
<i>Ivan Fesenko</i>	

Table of contents for Volume 2

Preface	ix
Contributors	xiii
Conjugacy in groups of finite Morley rank <i>Olivier Frécon and Eric Jaligot</i>	1
Permutation groups of finite Morley rank <i>Alexandre Borovik and Gregory Cherlin</i>	59
A survey of asymptotic classes and measurable structures <i>Richard Elwes and Dugald Macpherson</i>	125
Counting and dimensions <i>Ehud Hrushovski and Frank Wagner</i>	161
A survey on groups definable in o-minimal structures <i>Margarita Otero</i>	177
	vii

viii	
Decision problems in Algebra and analogues of Hilbert’s tenth problem	207
<i>Thanases Pheidas and Karim Zahidi</i>	
Hilbert’s Tenth Problem for function fields of characteristic zero	237
<i>Kirsten Eisenträger</i>	
First-order characterization of function field invariants over large fields	255
<i>Bjorn Poonen and Florian Pop</i>	
Nonnegative solvability of linear equations in ordered Abelian groups	273
<i>Philip Scowcroft</i>	
Model theory for metric structures	315
<i>Itai Ben Yaacov, Alexander Berenstein, C. Ward Henson and Alexander Usvyatsov</i>	