

Contents

<i>List of Contributors</i>	<i>page</i> vii
<i>Preface</i>	ix

PART I THE MONSTER

1 Lectures on Vertex Algebras	3
ATSUSHI MATSUO	
2 3-Transposition Groups Arising in Vertex Operator Algebra Theory	143
HIROSHI YAMAUCHI	
3 On Holomorphic Vertex Operator Algebras of Central Charge 24	164
CHING HUNG LAM	
4 Maximal 2-Local Subgroups of the Monster and Baby Monster	200
ULRICH MEIERFRANKENFELD AND SERGEY SHPECTOROV	
5 The Future of Majorana Theory II	246
ALEXANDER A. IVANOV	

PART II ALGEBRAIC COMBINATORICS

6 The Geometry of the Freudenthal–Tits Magic Square	289
HENDRIK VAN MALDEGHEM	
7 On the Generation of Polar Grassmannians	327
ILARIA CARDINALI, LUCA GIUZZI AND ANTONIO PASINI	
8 Ovoidal Maximal Subspaces of Polar Spaces	369
ANTONIO PASINI AND HENDRIK VAN MALDEGHEM	

9 On the Behaviour of Regular Unipotent Elements from Subsystem Subgroups of Type A_3 in Irreducible Representations of Groups of Type A_n with Special Highest Weights	403
TATSIANA S. BUSEL, IRINA D. SUPRUNENKO	
10 Some Remarks on the Parameter c_2 for a Distance-Regular Graph with Classical Parameters	423
JACK H. KOOLEN, JONGYOOK PARK AND QIANQIAN YANG	
11 Distance-Regular Graphs, the Subconstituent Algebra, and the Q-Polynomial Property	430
PAUL TERWILLIGER	
12 Terwilliger Algebras and the Weisfeiler–Leman Stabilization	492
TATSURO ITO	
13 Extended Double Covers of Non-Symmetric Association Schemes of Class 2	518
TAKUYA IKUTA AND AKIHIRO MUNEMASA	
14 Using GAP Packages for Research in Graph Theory, Design Theory, and Finite Geometry	527
LEONARD H. SOICHER	