

ELSEVIER

# JOURNAL OF ALGEBRA

---

**Editor-in-Chief**

Michel Broué

---

**Editor of the section  
on Computational  
Algebra**

Gerhard Hiss

---

**Founding Editor**

G. Higman, 1964–1984

---

**Editor-in-Chief**

W. Feit, 1985–2000

---

**Editorial Board**

Nicolás Andruskiewitsch

Lučezar L. Avramov

Paul Balmer

Eva Bayer-Fluckiger

Steven Dale Cutkosky

Alberto Elduque

Dihua Jiang

Masaki Kashiwara

E.I. Khukhro

Shrawan Kumar

Kazuhiko Kurano

Gus I. Lehrer

Martin Liebeck

Gunter Malle

Volodymyr Mazorchuk

Louis Rowen

Leonard L. Scott, Jr.

Vera Serganova

Aner Shalev

Ronald Solomon

V. Srinivas

J.T. Stafford

Gernot Stroth

Bernd Ulrich

Michel Van den Bergh

Changchang Xi

Efim Zelmanov

---

**Section on Computational Algebra**

Jon Carlson

John Cremona

Patrick Dehornoy

Harm Derksen

Derek Holt

William M. Kantor

Reinhard Laubenbacher

Eamonn O'Brien

Bruno Salvy

Seth Sullivant

Jean-Yves Thibon

Abstracted/indexed in Mathematical Reviews, Science Citation Index (ISI), Compumath Citation Index, Zentralblatt MATH, Current Contents: (PC & ES). Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®.

## CONTENTS

### General Section

<b>Non-archimedean directed fields <math>K(i)</math> with <math>\mathfrak{o}</math>-subfield <math>K</math> and <math>i^2 = -1</math></b>	1
Wolfgang Rump and Yichuan Yang	
<b>A generalization of the Burnside basis theorem</b>	8
Paul Apisa and Benjamin Klopsch	
<b>Discriminants of symplectic graded involutions on graded simple algebras</b>	17
Karim Mounirh	
<b>A restriction on centralizers in finite groups</b>	33
Gustavo A. Fernández-Alcober, Leire Legarreta, Antonio Tortora, and Maria Tota	
<b>The class of <math>(1, 3)</math>-groups with homocyclic regulator quotient of exponent <math>p^4</math> has bounded representation type</b>	43
David M. Arnold, Adolf Mader, Otto Mutzbauer, and Ebru Solak	
<b>Poisson spectra in polynomial algebras</b>	56
David A. Jordan and Sei-Qwon Oh	
<b>Finding inverse systems from coordinates</b>	72
Ştefan O. Tohăneanu	
<b>Examples of polycyclic groups with regular automorphisms of order 4</b>	78
B.A.F. Wehrfritz	
<b>A criterion of <math>p</math>-hypercyclically embedded subgroups of finite groups</b>	82
Ning Su, Yangming Li, and Yanming Wang	
<b>Semigroups of <math>sl_3(\mathbb{C})</math> tensor product invariants</b>	94
Christopher Manon and Zhengyuan Zhou	
<b>An amalgam uniqueness result for recognising <math>q^6 : SU_3(q), G_2(q)</math>, or <math>3M_{10}</math> using biaffine polar spaces</b>	105
Justin McInroy	
<b>Normal bundle of rational curves and Waring decomposition</b>	123
Alessandro Bernardi	
<b>Crystal <math>B(\lambda)</math> as a subset of crystal <math>B(\infty)</math> expressed as tableaux for <math>A_n</math> type</b>	142
Hyeonmi Lee	
<b>On the bilinear structure associated to Bezoutians</b>	161
F. Jouve and F. Rodriguez Villegas	

Continued on inside back cover

The Guide for Authors appears online on the journal homepage at <http://www.elsevier.com/locate/jalgebra>



*Continued from outside back cover*

<b>Representing stable complexes on projective spaces</b>	<b>185</b>
Jason Lo and Ziyu Zhang	
<b>Components of Springer fibers for the exceptional groups <math>G_2</math> and <math>F_4</math></b>	<b>219</b>
Brandon Samples	
<b>Pseudo-Hessian Lie algebras and L-dendriform bialgebras</b>	<b>273</b>
Xiang Ni and Chengming Bai	
<b>The Golod property for products and high symbolic powers of monomial ideals</b>	<b>290</b>
S.A. Seyed Fakhari and V. Welker	
<b>Tilting and refined Donaldson–Thomas invariants</b>	<b>299</b>
Magnus Engenhorst	
<i>Computational Section</i>	
<b>Exact holomorphic differentials on a quotient of the Ree curve</b>	<b>249</b>
Neil Dummigan and Shabieh Farwa	