



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
Luchezar 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
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
Gunter Malle

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 SciVerse Scopus[®]. Full text available on SciVerse ScienceDirect[®].

CONTENTS

General Section

The Launois–Lenagan conjecture	1
Milen Yakimov	
The additive group of a Lie nilpotent associative ring	10
Alexei Krasilnikov	
First degree cohomology of Specht modules over fields of odd prime characteristic	23
Christian Weber	
2-Groups with a fixed number of real conjugacy classes	42
Josu Sangroniz and Joan Tent	
Families of invariant divisors on rational complexity-one T-varieties	52
Andreas Hochenegger and Nathan Owen Ilten	
Free symmetric group algebras in division rings generated by poly-orderable groups	69
Vitor O. Ferreira, Jairo Z. Gonçalves, and Javier Sánchez	
Generalized Serre conditions and perverse coherent sheaves	85
Christopher L. Bremer and Daniel S. Sage	
Generalization of Deuring reduction theorem	97
Alexey Zaytsev	
The dual of Brown representability for homotopy categories of complexes	115
George Ciprian Modoi	
Polynomially and infinitesimally injective modules	125
Stephen Donkin and Haralampos Geranios	
The functor of p-permutation modules for abelian groups	142
Mélanie Baumann	
The Weil representation of a unitary group associated to a ramified quadratic extension of a finite local ring	158
Allen Herman and Fernando Szechtman	
On the normalizers of \mathcal{F}-residuals of all subgroups of a finite group	185
Ning Su and Yanming Wang	
The partial Schur multiplier of a group	199
M. Dokuchaev, B. Novikov, and H. Pinedo	

Continued on inside back cover

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



Boundedly simple groups of automorphisms of trees	226
Jakub Gismatullin	
On the definitions of nucleus for dialgebras	244
Juana Sánchez-Ortega	
The dual notion of the prime radical of a module	265
Seçil Çeken, Mustafa Alkan, and Patrick F. Smith	
Cohomology of Deligne–Lusztig varieties for short-length regular elements in exceptional groups	276
Olivier Dudas	
<i>Computational Section</i>	
Minimal primes of ideals arising from conditional independence statements	299
Irena Swanson and Amelia Taylor	
Fast recognition of alternating groups of unknown degree	315
Sebastian Jambor, Martin Leuner, Alice C. Niemeyer, and Wilhelm Plesken	