

BULLETIN

OF THE

AUSTRALIAN MATHEMATICAL SOCIETY

**Volume 65, Number 3
June, 2002**

*The Australian Mathematical Publishing Assoc. Inc.
Australian National University, ACT 0200, Australia
Printed in Australia by Instant Colour Press
Print Post approved - PP229219/00095*

ISSN 0004-9727

THE AUSTRALIAN MATHEMATICAL SOCIETY

President: A.L. Carey

School of Mathematical Sciences,
The Australian National University,
Canberra ACT 0200, Australia.

Secretary: E.J. Billington

Department of Mathematics,
The University of Queensland,
Queensland 4072, Australia.

Treasurer: A. Howe

School of Mathematical Sciences,
The Australian National University,
Canberra ACT 0200, Australia

Membership and correspondence.

Applications for membership, notices of change of address or title or position, members' subscriptions and correspondence related to accounts should be sent to the Treasurer. Correspondence about the distribution of the Society's BULLETIN, GAZETTE, and JOURNALS, and orders for back numbers should be sent to the Treasurer. All other correspondence should be sent to the Secretary.

The Bulletin.

The Bulletin of the Australian Mathematical Society began publication in 1969. Normally two volumes of three numbers are published annually. The BULLETIN is published for the Australian Mathematical Society by the Australian Mathematical Publishing Association Inc.

Editor: Alan S. Jones

Deputy Editor: Graeme A. Chandler

Honorary Editor: B.H. Neumann

Department of Mathematics,
The University of Queensland,
Queensland 4072, Australia.

ASSOCIATE EDITORS

Robert S. Anderssen

Alan L. Andrew

R. Bartnik

Elizabeth J. Billington

G. Cairns

J Clark

G.L. Cohen

John Cossey

B.D. Craven

Brian A. Davey

P. Donovan

J.R. Giles

J.A. Hempel

B.D. Hughes

G. Ivanov

B.R.F. Jefferies

B.D. Jones

N. Joshi

G.I. Lehrer

K.L. McAvaney

A.G.R. McIntosh

Sidney A. Morris

M. Murray

J.H. Rubinstein

Brailey Sims

Ross Street

R.P. Sullivan

E.U. Tarafdar

H.B. Thompson

N.S. Trudinger

A.J. van der Poorten

N.C. Weber

©Copyright Statement Where necessary, permission to photocopy for internal or personal use or the internal or personal use of specific clients is granted by the Treasurer, Australian Mathematical Publishing Association, Inc., for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$A2.00 per copy of article is paid directly to CCC, 21 Congress Street, Salem, MA 01970, U.S.A. Special requests should be addressed to the Treasurer, Australian Mathematical Publishing Association, Inc., School of Mathematical Sciences, ANU, Canberra ACT 0200 Australia. Serial-fee code: 0004-9727/02 \$A2.00 + 0.00.

ISSN 0004-9727

BULLETIN

of the

AUSTRALIAN MATHEMATICAL SOCIETY

Editor: Michael G. Cowling

Deputy Editor: Graeme A. Chandler

Honorary Editor: B.H. Neumann

Associate Editors

Robert S. Anderssen	B.D. Craven	B.D. Jones	Brailey Sims
Alan L. Andrew	Brian A. Davey	N. Joshi	Ross Street
R. Bartnik	P. Donovan	G.I. Lehrer	R.P. Sullivan
Elizabeth J. Billington	J.R. Giles	K.L. McAvaney	E.U. Tarafdar
G. Cairns	J.A. Hempel	A.G.R. McIntosh	H.B. Thompson
J. Clark	B.D. Hughes	Sidney A. Morris	N.S. Trudinger
G.L. Cohen	G. Ivanov	M. Murray	A.J. van der Poorten
John Cossey	B.R.F. Jefferies	J.H. Rubinstein	N.C. Weber

VOLUME 65 (2002)

The Australian Mathematical Publishing Assoc. Inc.
Department of Mathematics, ANU, ACT 0200 Australia

Contents

JAEHYUN AHN <i>see</i> HWANYUP JUNG	
S.H. ALAVI <i>see</i> A. IRANMANESH	
R.S. ANDERSSEN AND R.J. LOY, Completely monotone fading memory relaxation moduli	449
V.V. ANH <i>see</i> Z.G. YU	
PIERRE BARRUCAND AND MICHAEL D. HIRSCHHORN, Formulae associated with 5, 7, 9 and 11 squares	503
MOHAMED BELKELFA, FRANKI DILLEN AND JUN-ICHI INOGUCHI, Parallel surfaces in the real special linear group $SL(2, \mathbb{R})$	183
S.J. BHATT, H.V. DEDANIA AND S.R. PATEL, Fréchet algebras with a Laurent series generator and the annulus algebras	371
DAVID M. BRADLEY, ALI E. ÖZLUK AND C. SNYDER, On a class number formula for real quadratic number fields	259
KEVIN A. BROUGHAN, Vanishing of the integral of the Hurwitz zeta function	121
M. CENCELJ AND N. MRAMOR KOSTA, CW decompositions of equivariant CW complexes	45
SEUNG JUN CHANG AND DAVID SKOUG, Parts formulas involving conditional Feynman integrals	353
J.W. CHOI, Free surface waves over a depression	329
KOK SENG CHUA, An explicit Hecke's bound and exceptions of even unimodular quadratic forms	231
BRUNO COLBOIS AND PATRICK VEROVIC, Rigidity of Hilbert metrics	23
ROBERT S. COULTER AND MARIE HENDERSON, The compositional inverse of a class of permutation polynomials over a finite field	521
JIANLIAN CUI AND JINCHUAN HOU, Linear maps on von Neumann algebras preserving zero products on tr-rank	79
H.V. DEDANIA <i>see</i> S.J. BHATT	
FRANKI DILLEN <i>see</i> MOHAMED BELKELFA	
PANDELIS DODOS, On continuity and selections of multifunctions	407
ARTŪRAS DUBICKAS, On numbers which are differences of two conjugates of an algebraic integer	439
MARIÁN FABIAN, VICENTE MONTESINOS AND VÁCLAV ZIZLER, Weakly compact sets and smooth norms in Banach spaces	223
R. FRY, Extensions of uniformly smooth norms on Banach spaces	423
F. GHAHRAMANI AND J. LAALI, Amenability and topological centres of the second duals of Banach algebras	191
HENDRA GUNAWAN, Some weighted estimates for imaginary powers of Laplace operators	131
WENBIN GUO, K.P. SHUM AND A.N. SKIBA, On \mathcal{F} -residuals of finite groups	271
NGUYEN XUAN HA AND DO VAN LUU, Invexity of supremum and infimum functions	289
MARIE HENDERSON <i>see</i> ROBERT S. COULTER	
JONATHAN A. HILLMAN, Deficiencies of lattices in connected Lie groups	393
AICKE HINRICHSEN AND JÖRG WENZEL, The average distance property of classical Banach spaces II	511
MICHAEL D. HIRSCHHORN <i>see</i> PIERRE BARRUCAND	
DAVID HOBBY, Nondualisable semigroups	491
KARL HEINRICH HOFMANN, Arc components in locally compact groups are Borel sets	1
JINCHUAN HOU <i>see</i> CUI JIANLIAN	
DINH VAN HUYNH, Some remarks on CS modules and SI rings	461
JUN-ICHI INOGUCHI <i>see</i> MOHAMED BELKELFA	
A. IRANMANESH AND S.H. ALAVI, A characterisation of simple groups $PSL(5, q)$	211

JACEK JACHYMSKI, Another proof of the Browder–Göhde–Kirk theorem via ordering argument	105
HWANYUP JUNG AND JAEHYUN AHN, Maximal independent system of units in function fields	385
GIL KAPLAN AND ARIEH LEV, Transversals in permutation groups and factorisations of complete graphs	276
HONG OH KIM, RAE YOUNG KIM AND JAE KUN LIM, Semi-orthogonal frame wavelets and frame multi-resolution analyses	35
HYUN JUNG KIM, Hausdorff dimension of the limit set on a visibility manifold	199
MIN-SOO KIM AND JIN-WOO SON, On a multidimensional Volkenborn integral and higher order Bernoulli numbers	59
RAE YOUNG KIM <i>see</i> HONG OH KIM	
N. MRAMOR KOSTA <i>see</i> M. CENCELJ	
J. LAALI <i>see</i> F. GHAHRAMANI	
K.S. LAU <i>see</i> Z.G. YU	
JAESUNG LEE, Functions invariant under the Bochner–Martinelli integral	55
ARIEH LEV <i>see</i> GIL KAPLAN	
INESSA LEVI AND STEVE SEIF, Permutational labelling of constant weight Gray codes	399
SHI-JIE LI <i>see</i> YONG-AN QIN	
YANGMING LI <i>see</i> YANMING WANG	
JAE KUN LIM <i>see</i> HONG OH KIM	
R.J. LOY <i>see</i> R.S. ANDERSSEN	
DO VAN LUU <i>see</i> NGUYEN XUAN HA	
O. MACEDOŃSKA, Two questions on semigroup laws	431
VICENTE MONTESINOS <i>see</i> MARIÁN FABIAN	
WARREN B. MOORS AND SIVAJAH SOMASUNDARAM, Usco selections of densely defined set-valued mappings	307
TAKAHIKO NAKAZI AND TAKANORI YAMAMOTO, Norm of a linear combination of two operators on a Hilbert space	9
MARKKU NIEMENMAA, On finite loops whose inner mapping groups are Abelian	477
GRAHAM H. NORTON AND ANA SĂLĂGEAN, Gröbner bases and products of coefficient rings . .	147
ALI E. ÖZLUK <i>see</i> DAVID M. BRADLEY	
S.R. PATEL <i>see</i> S.J. BHATT	
ALAIN PLAGNE, Maximal (K, L) -free sets in $\mathbb{Z}/p\mathbb{Z}$ are arithmetic progressions	139
CRIS POOR AND DAVID S. YUEN, Restriction of Siegel modular forms to modular curves	239
W.H. PREVITS AND T.S. WU, On tidy subgroups of locally compact totally disconnected groups	485
YONG-AN QIN AND SHI-JIE LI, Total torsion of closed lines of curvature	73
FATHI B. SAIDI, Characterisations of orthogonality in certain Banach spaces	93
B.T. SCOTT, Summary functions in the analysis of spatial point patterns [A]	527
STEVE SEIF <i>see</i> INESSA LEVI	
K.P. SHUM <i>see</i> WENBIN GUO	
ADAM SIKORA AND JACEK ZIENKIEWICZ, A note on the heat kernel on the Heisenberg group .	115
A.N. SKIBA <i>see</i> WENBIN GUO	
DAVID SKOUG <i>see</i> SEUNG JUN CHANG	
C. SNYDER <i>see</i> DAVID M. BRADLEY	
SIVAJAH SOMASUNDARAM <i>see</i> WARREN B. MOORS	
JIN-WOO SON <i>see</i> KIN-SOO KIM	
ANA SĂLĂGEAN <i>see</i> GRAHAM H. NORTON	
HITOSHI TANAKA, A remark on the derivative of the one-dimensional Hardy-Littlewood maximal function	253
I. TULUNAY, Cuspidal modules of the finite general linear group [A]	175
ALESSANDRO VEGA, The Kunze-Stein phenomenon on the isometry group of a tree	155

PATRICK VEROVIC <i>see</i> BRUNO COLBOIS	
YANMING WANG, HUAQUAN WEI AND YANGMING LI, A generalisation of Kramer's theorem and its applications	467
HUAQUAN WEI <i>see</i> YANMING WANG	
JÖRG WENZEL <i>see</i> AICKE HINRICHHS	
T.S. WU <i>see</i> W.H. PREVITS	
HONG-KUN XU, Another control condition in an iterative method for nonexpansive mappings	109
TAKANORI YAMAMOTO <i>see</i> TAKAHIKO NAKAZI	
B. YOUSEFI, Interpolating sequence on certain Banach spaces of analytic functions	177
Z.G. YU, V.V. ANH AND K.S. LAU, Hausdorff dimension of random fractals with overlaps . .	315
DAVID S. YUEN <i>see</i> CRIS POOR	
YUEPING ZHU, Multipliers on weighted function spaces over locally compact Vilenkin groups .	337
JACEK ZIENKIEWICZ <i>see</i> ADAM SIKORA	
VÁCLAV ZIZLER <i>see</i> MARIÁN FABIAN	

[A] Abstracts of Australasian Ph.D. theses