# COLLOQUIUM MATHEMATICUM

VOL. 80 1999 NO. 2

# INDEX OF VOLUMES 71–80 (1997–1999)

### Aassila, M.

Strong asymptotic stability for n-dimensional thermoelasticity systems; 77 (1998), 133–139

Uniform boundary stabilization of a thermoelastic bar with a nonlinear weak damping; 79 (1999), 63–70.

### Abrams, G.

(with J. Haefner) Bounded Picard groups; 72 (1997), 325-334.

# Agrawal, P. N.

(with H. S. Kasana) Approximation by linear combination of Szász–Mirakian operators; 80 (1999), 123–130.

### Ahmadi-Amoli, Kh.

Local cohomology, d-sequences and generalized fractions; 74 (1997), 261–265.

#### Ahn, Y.

(with G. H. Choe) On normal numbers mod 2; 76 (1998), 161–170.

### Aizpuru, A.

The Nikodym property and local properties of Boolean algebras; 71 (1996), 79–85.

### Akaike, Y.

Homeomorphic neighborhoods in  $\mu^{n+1}$ -manifolds; 77 (1998), 245–250.

### Albrecht, U.

(with H. P. Goeters) Strong S-groups; 80 (1999), 97-105.

# Aldana, B. H.

(with A. Charris, O. Mora-Valbuena) On block recursions, Askey's sieved Jacobi polynomials and two related systems; 78 (1998), 57–91.

### Aliev, I.

(with S. Kanemitsu, A. Schinzel) On the metric theory of continued fractions; 77 (1998), 141-146.

### Angeleri Hügel, L.

(with H. Valenta) A duality result for almost split sequences; 80 (1999), 267-292.

### Appell, J.

(with A. S. Kalitvin, P. P. Zabreĭko) Partial integral operators in Orlicz spaces with mixed norm; 78 (1998), 293–306.

### Arnold, D.

(with M.  ${\rm D}\,{\rm u}\,{\rm g}\,{\rm a}\,{\rm s})$  Representation type of posets and finite rank Butler groups; 74 (1997), 299–320.

[309]

## Arslan, K.

(with R. Deszcz, Ş. Yaprak) On Weyl pseudosymmetric hypersurfaces; 72 (1997), 353–361.

(with Y. Çelik, R. Deszcz, R. Ezentaş) On the equivalence of Ricci-semisymmetry and semisymmetry; 76 (1998), 279–294.

#### Assem, I.

(with Y. B. Zhang) Endomorphism algebras of exceptional sequences over path algebras of type  $\widetilde{\mathbb{A}}_n$ ; 77 (1998), 271–292.

### Astengo, F.

(with B. Di Blasio) A Paley–Wiener theorem on NA harmonic spaces; 80 (1999), 211–233.

### Auscher, P.

(with T. Coulhon, P. Tchamitchian) Absence de principe du maximum pour certaines équations paraboliques complexes; 71 (1996), 87–95.

#### Avala, R.

(with M. J. Chávez, A. Quintero) On the planarity of Peano generalized continua: An extension of a theorem of S. Claytor; 75 (1998), 175–181.

### Ayerbe, J. M.

(with T. Domínguez Benavides, S. Francisco Cutillas) A modulus for property (β) of Rolewicz; 73 (1997), 183–191.

### Balcerzak, M.

Generalized projections of Borel and analytic sets; 71 (1996), 47–53.

(with Z. Buczolich, M. Laczkovich) Lipschitz differences and Lipschitz functions; 72 (1997), 319–324.

### Balcerzyk, S.

Representation ring of the sequence of alternating groups; 74 (1997), 147–155.

### Banakh, T.

(with R. Cauty) Universalité forte pour les sous-ensembles totalement bornés. Applications aux espaces  $C_p(X)$ ; 73 (1997), 25–33.

### Barot, M.

(with J. A. de la Peña) Algebras whose Euler form is non-negative; 79 (1999), 119-131.

# Bartholdi, L.

(with S. Cantat, T. Ceccherini-Silberstein, P. de la Harpe) Estimates for simple random walks on fundamental groups of surfaces; 72 (1997), 173–193.

### Basu, S.

(with T. S. S. R. K. Rao) Some stability results for asymptotic norming properties of Banach spaces; 75 (1998), 271–284.

### Bator, E.

(with P. Lewis, J. Ochoa) Evaluation maps, restriction maps, and compactness; 78 (1998), 1–17.

### Bell, M.

Tightness and  $\pi$ -character in centered spaces; 80 (1999), 297–307.

### Ben Nasr, F.

Calculs de dimensions de packing; 71 (1996), 137-148.

#### Benson, C

(with J. Jenkins, G. Ratcliff, T. Worku) Spectra for Gelfand pairs associated with the Heisenberg group; 71 (1996), 305–328.

### Berntzen, R.

Extreme points of the closed unit ball in  $C^*$ -algebras; 74 (1997), 99–100.

### Betsakos, D.

On certain harmonic measures on the unit disk; 73 (1997), 221–228.

On bounded univalent functions that omit two given values; 80 (1999), 253–258.

### Białynicki-Birula, A.

(with J. Święcicka) A recipe for finding open subsets of vector spaces with a good quotient; 77 (1998), 97–114.

### Bielawski, D.

Generic properties of some boundary value problems for differential equations; 73 (1997), 173–181.

### Bobiński, G.

(with A. Skowroński) Geometry of modules over tame quasi-tilted algebras; 79 (1999), 85–118.

On additive functions for stable translation quivers; 79 (1999), 203–210.

### Brandolini, L.

(with L. Colzani) Fourier transform, oscillatory multipliers and evolution equations in rearrangement invariant function spaces; 71 (1996), 273–286.

### Brenner, S.

The Auslander translate of a short exact sequence; 78 (1998), 49–56.

### Buczolich, Z.

(with M. Balcerzak, M. Laczkovich) Lipschitz differences and Lipschitz functions; 72 (1997), 319–324.

## Čadek, M.

(with J. Vanžura) On 4-fields and 4-distributions in 8-dimensional vector bundles over 8-complexes; 76 (1998), 213–228.

### Cantat, S.

(with L. Bartholdi, T. Ceccherini-Silberstein, P. de la Harpe) Estimates for simple random walks on fundamental groups of surfaces; 72 (1997), 173–193.

### Carro, M. J.

(with J. Soria) Transference theory on Hardy and Sobolev spaces; 74 (1997), 47–69.

### Carron, G.

Inégalités de Sobolev-Orlicz non-uniformes; 77 (1998), 163-178.

### Carter, J. E.

Steinitz classes of a nonabelian extension of degree  $p^3$ ; 71 (1996), 297–303.

Module structure of integers in metacyclic extensions; 76 (1998), 191–199.

### Cauty, R.

(with T. Banakh) Universalité forte pour les sous-ensembles totalement bornés. Applications aux espaces  $C_p(X)$ ; 73 (1997), 25–33.

Un exemple de sous-groupe additif de l'espace de Hilbert; 77 (1998), 147-162.

#### Ceccherini-Silberstein, T.

(with L. Bartholdi, S. Cantat, P. de la Harpe) Estimates for simple random walks on fundamental groups of surfaces; 72 (1997), 173–193.

### Çelik, Y.

(with K. Arslan, R. Deszcz, R. Ezentas) On the equivalence of Ricci-semisymmetry and semisymmetry; 76 (1998), 279–294.

#### Chang, C. H.

(with C. W. Ha) Bounds for the singular values of smooth kernels; 78 (1998), 319-324.

### Chao, J.-A.

(with L. Peng) Schatten classes and commutators on simple martingales; 71 (1996), 7–21.

#### Charatonik, J. J.

(with W. J. Charatonik) Hereditarily weakly confluent induced mappings are homeomorphisms; 75 (1998), 195–203.

### Charatonik, W. J.

(with J. J. Charatonik) Hereditarily weakly confluent induced mappings are homeomorphisms; 75 (1998), 195–203.

#### Charris, A.

(with B. H. Aldana, O. Mora-Valbuena) On block recursions, Askey's sieved Jacobi polynomials and two related systems; 78 (1998), 57–91.

### Choe, G. H.

(with Y. Ahn) On normal numbers mod 2; 76 (1998), 161-170.

### Chávez, M. J.

(with R. Ayala, A. Quintero) On the planarity of Peano generalized continua: An extension of a theorem of S. Claytor; 75 (1998), 175–181.

### Ciesielski, K.

Sum and difference free partitions of vector spaces; 71 (1996), 263–271.

(with D. Dikranjan, S. Watson) Functions characterized by images of sets; 77 (1998), 211–232.

### Cohen, G. L.

On a conjecture of Makowski and Schinzel; 74 (1997), 1–8.

### Cohn, P. M.

The universal skew field of fractions of a tensor product of free rings; 72 (1997), 1–8; Correction, 76 (1998), 319.

# Colzani, L.

(with L. Brandolini) Fourier transform, oscillatory multipliers and evolution equations in rearrangement invariant function spaces; 71 (1996), 273–286.

### Coulhon, T.

(with P. Auscher, P. Tchamitchian) Absence de principe du maximum pour certaines équations paraboliques complexes; 71 (1996), 87–95.

### Cowling, M.

(with S. Meda, A. G. Setti) Invariant operators on function spaces on homogeneous trees; 80 (1999), 53–61.

### Czaja, W.

(with Z. Rzeszotnik) Two remarks about spectral asymptotics of pseudodifferential operators; 80 (1999), 131–145.

### Damek, E.

Fundamental solutions of differential operators on homogeneous manifolds of negative curvature and related Riesz transforms; 73 (1997), 229–249.

#### Daszkiewicz, A.

(with T. Przebinda) On the moment map of a multiplicity free action; 71 (1996), 107–110.

### Davies, D.

A note on the limit points associated with the generalized *abc*-conjecture for  $\mathbb{Z}[t]$ ; 71 (1996), 329–333.

### Defever, F.

(with R. Deszcz, L. Verstraelen) On pseudosymmetric para-Kähler manifolds; 74 (1997), 253–260.

#### De Koninck, J.-M.

(with J. Grah) Arithmetic functions and weighted averages; 79 (1999), 249–272.

### Delmotte, T.

Inégalité de Harnack elliptique sur les graphes; 72 (1997), 19-37.

#### Deszcz, R.

(with K. Arslan, Ş. Yaprak) On Weyl pseudosymmetric hypersurfaces; 72 (1997), 353–361.

(with F. Defever, L. Verstraelen) On pseudosymmetric para-Kähler manifolds; 74 (1997), 253–260.

(with K. Arslan, Y. Çelik, R. Ezentaş) On the equivalence of Ricci-semisymmetry and semisymmetry; 76 (1998), 279–294.

(with M. Hotloś, Z. Ṣentürk) On the equivalence of the Ricci-pseudosymmetry and pseudosymmetry; 79 (1999), 211–227.

### Diaconis, P.

(with R. Graham) The graph of generating sets of an abelian group; 80 (1999), 31–38.

### Di Blasio, B.

(with F. Astengo) A Paley-Wiener theorem on NA harmonic spaces; 80 (1999), 211–233.

### Dijkstra, J. J.

(with J. van Mill) Extending monotone mappings; 77 (1998), 201–210.

# Dikranjan, D.

(with K. Ciesielski, S. Watson) Functions characterized by images of sets; 77 (1998), 211–232.

## Ding, Y.

Rough singular integral operators with Hardy space function kernels on a product domain; 73 (1997), 15–23.

### Domínguez Benavides, T.

(with J. M. Ayerbe, S. Francisco Cutillas) A modulus for property  $(\beta)$  of Rolewicz; 73 (1997), 183–191.

### Donchev, T.

Lower semicontinuous differential inclusions. One-sided Lipschitz approach; 74 (1997), 177–184.

## Dowbor, P.

The pure-projective ideal of a module category; 71 (1996), 203–215.

#### Downarowicz, T.

Reading along arithmetic progressions; 80 (1999), 293-296.

### Dräxler, P.

(with N. Golovachtchuk, S. Ovsienko, J. A. de la Peña) Coordinates of maximal roots of weakly non-negative unit forms; 78 (1998), 163–193.

#### Drissi, D.

Local spectrum and Kaplansky's theorem on algebraic operators; 75 (1998), 159–165.

### Dudek, J.

The minimal extension of sequences III. On problem 16 of Grätzer and Kisielewicz; 71 (1996), 335–338.

### Dugas, M.

(with D. Arnold) Representation type of posets and finite rank Butler groups; 74 (1997), 299–320.

### Dziubański, J.

A note on Schrödinger operators with polynomial potentials; 78 (1998), 149–161.

### Elsner, C.

On arithmetic properties of the convergents of Euler's number; 79 (1999), 133–145.

### ter Elst, A. F. M.

(with D. W. Robinson, A. Sikora) Heat kernels and Riesz transforms on nilpotent Lie groups; 74 (1997), 191–218.

### Ezentaș, R.

(with K. Arslan, Y. Celik, R. Deszcz) On the equivalence of Ricci-semisymmetry and semisymmetry; 76 (1998), 279–294.

### Faivre, C.

On the central limit theorem for random variables related to the continued fraction expansion; 71 (1996), 153–159.

### Ferenczi, S.

Systems of finite rank; 73 (1997), 35-65.

# Ferreyra, E.

(with T. Godoy, M. Urciuolo) Endpoint bounds for convolution operators with singular measures; 76 (1998), 35–47.

## Filaseta, M.

(with S. Konyagin) On a limit point associated with the *abc*-conjecture; 76 (1998), 265–268.

#### Florkiewicz, B.

(with M. Kuchta) Some quadratic integral inequalities of first order; 75 (1998), 7-18.

#### Font, J. J.

Disjointness preserving mappings between Fourier algebras; 77 (1998), 179–187.

#### Franchi, B.

(with R. L. Wheeden) Compensation couples and isoperimetric estimates for vector fields; 74 (1997), 9–27.

### Francisco Cutillas, S.

(with J. M. Ayerbe, T. Domínguez Benavides) A modulus for property ( $\beta$ ) of Rolewicz; 73 (1997), 183–191.

#### Frontczak, M.

(with P. Skibiński, S. Spodzieja) Salomon's Theorem for polynomials with several parameters; 80 (1999), 107–114.

### Fuchs, L.

(with L. Salce, P. Zanardo) Note on the transitivity of pure essential extensions; 78 (1998), 283-291.

#### Fuller, K. R.

On reflexivity of representations of local commutative algebras; 77 (1998), 115–119.

#### Galvão, M. L.

(with P. F. Smith) Chain conditions in modular lattices; 76 (1998), 85–98.

### Gangopadhyay, S.

(with B. V. Rao) Completeness of  $L_1$  spaces over finitely additive probabilities; 80 (1999), 83–95.

#### Gao, W. D.

On a combinatorial problem connected with factorizations; 72 (1997), 251–268.

#### Garcia, J. L.

(with D.  ${\tt Simson})$  On rings whose flat modules form a Grothendieck category; 73 (1997), 115–141.

### Gaudry, G.

(with P. Sjögren) Singular integrals on the complex affine group; 75 (1998), 133-148.

## Gebuhrer, O.

(with A. L. Schwartz) Sidon sets and Riesz sets for some measure algebras on the disk; 72 (1997), 269–279.

### Geroldinger, A.

Chains of factorizations in weakly Krull domains; 72 (1997), 53–81.

Chains of factorizations in orders of global fields; 72 (1997), 83–102.

A structure theorem for sets of lengths; 78 (1998), 225–259.

### Gillard, J.

Characterizations of complex space forms by means of geodesic spheres and tubes; 71 (1996), 253–262.

## Göbel, R.

(with D. Simson) Embeddings of Kronecker modules into the category of prinjective modules and the endomorphism ring problem; 75 (1998), 213–244.

### Godoy, T.

(with L. Saal, M. Urciuolo) On some singular integral operators close to the Hilbert transform; 72 (1997), 9–17.

(with E. Ferreyra, M. Urciuolo) Endpoint bounds for convolution operators with singular measures; 76 (1998), 35–47.

### Goeters, H. P.

(with U. Albrecht) Strong S-groups; 80 (1999), 97-105.

### Golasiński, M.

Componentwise injective models of functors to DGAs; 73 (1997), 83–92.

(with D. L. Gonçalves) Comultiplications of the wedge of two Moore spaces; 76 (1998), 229-242.

#### Golovachtchuk, N.

(with P. Dräxler, S. Ovsienko, J. A. de la Peña) Coordinates of maximal roots of weakly non-negative unit forms; 78 (1998), 163–193.

## Gonçalves, D. L.

(with M. Golasiński) Comultiplications of the wedge of two Moore spaces; 76 (1998), 229–242.

### Grah, J.

(with J.-M. De Koninck) Arithmetic functions and weighted averages; 79 (1999), 249–272.

### Graham, R.

(with P. Diaconis) The graph of generating sets of an abelian group; 80 (1999), 31–38.

### Grätzer, G.

(with F. Wehrung) Flat semilattices; 79 (1999), 185-191.

#### Grow, D. E.

(with M. Insall) Further properties of an extremal set of uniqueness; 77 (1998), 33-39.

### Grubb, D. J.

(with C. N. Moore) A variant of Hörmander's condition for singular integrals; 73 (1997), 165–172.

### Ha, C. W.

(with C. H. Chang) Bounds for the singular values of smooth kernels; 78 (1998), 319–324.

### Haefner, J.

(with G. Abrams) Bounded Picard groups; 72 (1997), 325–334.

## Happel, D.

Hochschild cohomology of piecewise hereditary algebras; 78 (1998), 261–266.

# Hare, K. E.

Sidonicity in compact, abelian hypergroups; 76 (1998), 171–180.

### de la Harpe, P.

(with L. Bartholdi, S. Cantat, T. Ceccherini-Silberstein) Estimates for simple random walks on fundamental groups of surfaces; 72 (1997), 173–193.

### ${ m Hebisch,\,W.}$

Boundedness of  $L^1$  spectral multipliers for an exponential solvable Lie group; 73 (1997), 155–164.

### Hejduk, J.

Convergence with respect to  $F_{\sigma}$ -supported ideals; 72 (1997), 363–368.

### Herzog, G.

On a theorem of Mierczyński; 76 (1998), 19-29.

### Hotloś, M.

(with R. Deszcz, Z. Şentürk) On the equivalence of the Ricci-pseudosymmetry and pseudosymmetry; 79 (1999), 211–227.

### **Hu, Z. J.** (= Hu, Ze-Jun)

Isometric immersions of the hyperbolic space  $H^n(-1)$  into  $H^{n+1}(-1)$ ; 79 (1999), 17–23.

### $\mathbf{Hu}, \mathbf{Z}. (= \mathrm{Hu}, \mathrm{Zhiguo})$

Extreme non-Arens regularity of quotients of the Fourier algebra A(G); 72 (1997), 237–249.

#### Huard, J. G.

(with B. K. Spearman, K. S. Williams) On Pascal's triangle modulo  $p^2$ ; 74 (1997), 157–165.

### Hübner, T.

Rank additivity for quasi-tilted algebras of canonical type; 75 (1998), 183-193.

#### Idziak, P. M.

(with A. Wroński) Definability of principal congruences in equivalential algebras; 74 (1997), 225–238.

#### Illanes, A.

The openness of induced maps on hyperspaces; 74 (1997), 219–224.

#### Insall, M.

(with D. E. Grow) Further properties of an extremal set of uniqueness; 77 (1998), 33–39.

### Iwanik, A.

Spectral properties of skew-product diffeomorphisms of tori; 72 (1997), 223–235.

### Jaming, P.

Harmonic functions on the real hyperbolic ball I: Boundary values and atomic decomposition of Hardy spaces; 80 (1999), 63–82.

### Jarboui, N.

Some remarks on the altitude inequality; 80 (1999), 39–52.

### Jaworski, P.

On the Witt rings of function fields of quasihomogeneous varieties; 73 (1997), 195–219.

## Jędrzejewicz, P.

Quasi-commutative polynomial algebras and the power property of  $2\times 2$  quantum matrices; 71 (1996), 217–224.

### Jelonek, W.

K-contact A-manifolds; 75 (1998), 97-103.

### Jenkins, J.

(with C. Benson, G. Ratcliff, T. Worku) Spectra for Gelfand pairs associated with the Heisenberg group; 71 (1996), 305–328.

### Judah, H.

(with A. Lior, I. Recław) Very small sets; 72 (1997), 207-213.

### Kainrath, F.

Factorization in Krull monoids with infinite class group; 80 (1999), 23-30.

### Kałamajska, A.

On lower semicontinuity of multiple integrals; 74 (1997), 71–78.

#### Kalitvin, A. S.

(with J. Appell, P. P. Zabreĭko) Partial integral operators in Orlicz spaces with mixed norm; 78 (1998), 293–306.

### Kalton, N. J.

(with N. T. Peck) A remark on a problem of Klee; 71 (1996), 1-5.

### Kanemitsu, S.

(with I. Aliev, A. Schinzel) On the metric theory of continued fractions; 77 (1998), 141–146.

#### Karimov, U. H.

(with D. Repovš) On  $\check{H}^n$ -bubbles in *n*-dimensional compacta; 75 (1998), 39–51.

#### Karno, Z

On a theorem of P. S. Aleksandrov; 72 (1997), 39-51.

#### Kasana, H. S.

(with P. N. Agrawal) Approximation by linear combination of Szász–Mirakian operators; 80 (1999), 123–130.

#### Kasian, S.

Minimal bipartite algebras of infinite prinjective type with prin-preprojective component; 76 (1998), 295–317.

#### Kawamura, K.

(with E. D. Tymchatyn) Continua which admit no mean; 71 (1996), 97-105.

### Keleti, T.

Periodic  $\operatorname{Lip}^{\alpha}$  functions with  $\operatorname{Lip}^{\beta}$  difference functions; 76 (1998), 99–103.

### Kerner, O.

Wild tilted algebras revisited; 73 (1997), 67–81.

### Khashyarmanesh, K.

(with Sh. Salarian) General local cohomology modules and Koszul homology modules; 77 (1998), 305–313.

### Klimek, J.

(with W. Kraśkiewicz, J. Weyman) The Grothendieck group of G-equivariant modules over coordinate rings of G-orbits; 78 (1998), 105–118.

### Kon, M.

(with M. Yamagata) Reduction of the codimension of a generic minimal submanifold immersed in a complex projective space; 74 (1997), 185–190.

### Konyagin, S.

(with M. Filaseta) On a limit point associated with the *abc*-conjecture; 76 (1998), 265–268.

### Koubek, V.

(with J. Sichler) Equimorphy in varieties of double Heyting algebras; 77 (1998), 41–58.

### Koumandos, S.

On a positive sine sum; 71 (1996), 243-251.

### Kourogenis, N. C.

(with N. S. Papageorgiou) Discontinuous quasilinear elliptic problems at resonance; 78 (1998), 213–223.

### Kraśkiewicz, W.

(with J. Klimek, J. Weyman) The Grothendieck group of G-equivariant modules over coordinate rings of G-orbits; 78 (1998), 105–118.

### Krause, H.

Functors on locally finitely presented additive categories; 75 (1998), 105–132.

### Kuchta, M.

(with B. Florkiewicz) Some quadratic integral inequalities of first order; 75 (1998), 7–18.

### Laczkovich, M.

(with M. Balcerzak, Z. Buczolich) Lipschitz differences and Lipschitz functions; 72 (1997), 319–324.

Operators commuting with translations, and systems of difference equations; 80 (1999), 1-22.

### Lau, A. T.

(with P. Milnes, J. S. Pym) Flows on invariant subsets and compactifications of a locally compact group; 78 (1998), 267–281.

### Laurençot, Ph.

(with D. Wrzosek) The Becker–Döring model with diffusion. I. Basic properties of solutions; 75 (1998), 245–269.

### Le, M. H.

(with H. M. Wu) A note on the diophantine equation  $(x^2 - 1)(y^2 - 1) = (z^2 - 1)^2$ ; 71 (1996), 133–136.

A note on the diophantine equation  $\binom{k}{2} - 1 = q^n + 1$ ; 76 (1998), 31–34.

## Lefevre, P.

On some properties of the class of stationary sets; 76 (1998), 1–18.

### Lehner, F.

Free operators with operator coefficients; 74 (1997), 321–328.

## Lenzing, H.

(with A. Skowroński) Quasi-tilted algebras of canonical type; 71 (1996), 161–181. (with A. Skowroński) On selfinjective algebras of Euclidean type; 79 (1999), 71–76.

### Lewis, P.

(with E. Bator, J. Ochoa) Evaluation maps, restriction maps, and compactness; 78 (1998), 1–17.

Mapping properties of  $c_0$ ; 80 (1999), 235–244.

### Li, H. Z.

Some nonexistence theorems on stable minimal submanifolds; 73 (1997), 1–13.

### Ligocka, E.

On quasiregular polynomial mappings; 75 (1998), 79–89.

On the uniformization of Hartogs domains in  $\mathbb{C}^2$  and their envelopes of holomorphy; 77 (1998), 265–269.

### Lior, A.

(with H. Judah, I. Recław) Very small sets; 72 (1997), 207-213.

#### Liu, W. J.

(with G. H. Williams) Exact Neumann boundary controllability for second order hyperbolic equations; 76 (1998), 117–142.

#### Louboutin, S.

The imaginary cyclic sextic fields with class numbers equal to their genus class numbers; 75 (1998), 205–212.

The class number one problem for the dihedral and dicyclic CM-fields; 80 (1999), 259–265.

#### de Lucia, P.

(with P. Pták) Quantum logics with classically determined states; 80 (1999), 147-154.

### Łuczak, T.

(with T. Schoen) On strongly sum-free subsets of abelian groups; 71 (1996), 149–151. (with T. Schoen) Small bases for finite groups; 78 (1998), 35–37.

#### Lundström, P.

Normal bases for infinite Galois ring extensions; 79 (1999), 235–240.

#### Mader, A.

(with C. Vinsonhaler) The Idempotent Lifting Theorem for almost completely decomposable abelian groups; 72 (1997), 305–317.

#### Malicki, P.

Generalized coil enlargements of algebras; 76 (1998), 57–83.

### Maouche, A.

Formes multiplicatives à valeurs dans le spectre; 71 (1996), 43-45.

### Marczak, A. W.

On nondistributive Steiner quasigroups; 74 (1997), 135–145.

### Maslowski, B.

(with I. Simão) Asymptotic properties of stochastic semilinear equations by the method of lower measures; 72 (1997), 147–171.

### Matsuo, K.

Pseudo-Bochner curvature tensor on Hermitian manifolds; 80 (1999), 201–209.

### McDaniel, W. L.

(with P. Ribenboim) Squares in Lucas sequences having an even first parameter; 78 (1998), 29–34.

### Meda, S.

(with M. Cowling, A. G. Setti) Invariant operators on function spaces on homogeneous trees; 80 (1999), 53–61.

### Meltzer, H.

Auslander–Reiten components for concealed-canonical algebras; 71 (1996), 183–202. Tubular mutations; 74 (1997), 267–274.

## Mierczyński, J.

Invariant manifolds for one-dimensional parabolic partial differential equations of second order; 75 (1998), 285–314.

Three-dimensional cooperative irreducible systems with a first integral; 76 (1998), 181–190.

### Mikrut, P.

Bordism of spin manifolds with local actions of tori in low dimensions; 73 (1997), 143–154. Bordism of oriented 5-manifolds with T-structure and polarization; 79 (1999), 161–184.

#### van Mill, J

(with J. J. Dijkstra) Extending monotone mappings; 77 (1998), 201-210.

#### Milnes, P.

(with A. T. Lau, J. S. Pym) Flows on invariant subsets and compactifications of a locally compact group; 78 (1998), 267–281.

#### Moore, C. N.

(with D. J. Grubb) A variant of Hörmander's condition for singular integrals; 73 (1997), 165–172.

### Mora-Valbuena, O.

(with B. H. Aldana, A. Charris) On block recursions, Askey's sieved Jacobi polynomials and two related systems; 78 (1998), 57–91.

#### Morris, S. A.

(with V. Pestov) On Lie groups in varieties of topological groups; 78 (1998), 39-47.

### Muthuvel, K.

Application of covering sets; 80 (1999), 115–122.

#### Mycielski, J.

Non-amenable groups with amenable action and some paradoxical decompositions in the plane; 75 (1998), 149–157.

### Mydlarczyk, W.

The blow-up solutions of integral equations; 79 (1999), 147–156.

### Nörenberg, R.

(with A. Skowroński) Tame minimal non-polynomial growth simply connected algebras; 73 (1997), 301–330.

### Nowak, K. (= Nowak, Krzysztof)

Certain function spaces related to the metaplectic representation; 76 (1998), 143–152.

## Nowak, K. J. (= Nowak, Krzysztof Jan)

On the intersection multiplicity of images under an etale morphism; 75 (1998), 167–174.

### Ochoa, J.

(with E. Bator, P. Lewis) Evaluation maps, restriction maps, and compactness; 78 (1998), 1–17.

### Ohnuki, Y.

(with K. Takeda, K. Yamagata) Symmetric Hochschild extension algebras; 80 (1999), 155–174.

### Okada, S.

(with W. J. Ricker) Continuous extensions of spectral measures; 71 (1996), 115–132.

### Okoh, F.

Extensionless modules over tame hereditary algebras; 73 (1997), 285–299.

#### O'Neill, M. D.

J. E. McMillan's area theorem; 79 (1999), 229–234.

#### Ossowski, P.

A counterexample to a conjecture of Bass, Connell and Wright; 77 (1998), 315–320. On the formal inverse of polynomial endomorphisms; 78 (1998), 97–104.

#### Ostrogorski, T.

Weighted norm inequalities and homogeneous cones; 77 (1998), 251–264.

### Ovsienko, S.

(with P. Dräxler, N. Golovachtchuk, J. A. de la Peña) Coordinates of maximal roots of weakly non-negative unit forms; 78 (1998), 163–193.

### Papageorgiou, N. S.

(with N. C. Kourogenis) Discontinuous quasilinear elliptic problems at resonance; 78 (1998), 213–223.

### Park, J. A.

(with S. Park) The Idzik type quasivariational inequalities and noncompact optimization problems; 71 (1996), 287–295.

#### Park, S.

(with J. A. Park) The Idzik type quasivariational inequalities and noncompact optimization problems; 71 (1996), 287–295.

### Peck, N. T.

(with N. J. Kalton) A remark on a problem of Klee; 71 (1996), 1–5.

### de la Peña, J. A.

(with M. Takane) Constructing the directing components of an algebra; 74 (1997), 29–46. (with P. Dräxler, N. Golovachtchuk, S. Ovsienko) Coordinates of maximal roots of weakly non-negative unit forms; 78 (1998), 163–193.

(with M. Barot) Algebras whose Euler form is non-negative; 79 (1999), 119–131.

### Peng, L.

(with J.-A. Chao) Schatten classes and commutators on simple martingales; 71 (1996), 7–21.

### Pestov, V. G. (= Pestov, V.)

(with D. B. Shakhmatov) A relatively free topological group that is not varietal free; 77 (1998), 1–8.

(with S. A. Morris) On Lie groups in varieties of topological groups; 78 (1998), 39-47.

## Pezda, T.

Cycles of polynomials in algebraically closed fields of positive characteristic (II); 71 (1996), 23-30.

### Pittet, C.

On the isoperimetry of graphs with many ends; 78 (1998), 307–318.

### Płonka, J.

Subdirect decompositions of algebras from 2-clone extensions of varieties; 77 (1998), 189–199.

### Ploščica, M.

(with J. Tůma, F. Wehrung) Congruence lattices of free lattices in non-distributive varieties; 76 (1998), 269–278.

### Pogorzały, Z.

On locally bounded categories stably equivalent to the repetitive algebras of tubular algebras; 72 (1997), 123–146.

### Przebinda, T.

(with A. Daszkiewicz) On the moment map of a multiplicity free action; 71 (1996), 107–110.

### Pták, P.

(with P. de Lucia) Quantum logics with classically determined states; 80 (1999), 147–154.

### Pym, J. S.

(with A. T. Lau, P. Milnes) Flows on invariant subsets and compactifications of a locally compact group; 78 (1998), 267–281.

#### Quintero, A.

(with R. Ayala, M. J. Chávez) On the planarity of Peano generalized continua: An extension of a theorem of S. Claytor; 75 (1998), 175–181.

### Randrianantoanina, N.

Pełczyński's property (V) on spaces of vector-valued functions; 71 (1996), 63–78.

### Rao, B. V.

(with S. Gangopadhyay) Completeness of  $L_1$  spaces over finitely additive probabilities; 80 (1999), 83–95.

### Rao, T. S. S. R. K.

(with S. Basu) Some stability results for asymptotic norming properties of Banach spaces; 75 (1998), 271–284.

### Ratcliff, G.

(with C. Benson, J. Jenkins, T. Worku) Spectra for Gelfand pairs associated with the Heisenberg group; 71 (1996), 305–328.

### Recław, I.

(with H. Judah, A. Lior) Very small sets; 72 (1997), 207-213.

### Render, H.

Topological algebras with an orthogonal total sequence; 72 (1997), 215–221.

Hadamard's multiplication theorem—recent developments; 74 (1997), 79–92.

### Renshaw, J.

On subrings of amalgamated free products of rings; 79 (1999), 241–248.

# Repovš, D.

(with U. H. Karimov) On  $\check{H}^n$ -bubbles in *n*-dimensional compacta; 75 (1998), 39–51.

### Ribenboim, P.

(with W. L. McDaniel) Squares in Lucas sequences having an even first parameter; 78 (1998), 29–34.

### Ricker, W. J.

(with S. Okada) Continuous extensions of spectral measures; 71 (1996), 115–132.

### Ringel, C. M.

The Ziegler spectrum of a tame hereditary algebra; 76 (1998), 105–115.

#### Rivat, J.

On the metric theory of continued fractions; 79 (1999), 9–15.

# Robinson, D. W.

(with A. F. M. ter Elst, A. Sikora) Heat kernels and Riesz transforms on nilpotent Lie groups; 74 (1997), 191–218.

### Roggenkamp, K. W.

Generalized Brauer tree orders; 71 (1996), 225–242.

### Rosicki, W.

On decomposition of polyhedra into a Cartesian product of 1-dimensional and 2-dimensional factors; 72 (1997), 103–109.

#### Rump, W.

Green walks in a hypergraph; 78 (1998), 133–147.

### Rzeszotnik, Z.

(with W. Czaja) Two remarks about spectral asymptotics of pseudodifferential operators; 80 (1999), 131–145.

#### Saal, L.

(with T. Godoy, M. Urciuolo) On some singular integral operators close to the Hilbert transform; 72 (1997), 9–17.

### Salarian, Sh.

(with K. Khashyarmanesh) General local cohomology modules and Koszul homology modules; 77 (1998), 305–313.

### Salce, L.

(with L. Fuchs, P. Zanardo) Note on the transitivity of pure essential extensions; 78 (1998), 283–291.

## Salwa, A.

Representing idempotents as a sum of two nilpotents—an approach via matrices over division rings; 77 (1998), 59–83.

### Sampson, G.

 $L^2$  estimates for oscillatory integrals; 76 (1998), 201–211.

### Sanchis, M.

(with A. Tamariz-Mascarúa) On quasi-p-bounded subsets; 80 (1999), 175-189.

### Sato, R.

Vector-valued ergodic theorems for multiparameter additive processes; 79 (1999), 193–202.

# Schinzel, A.

(with I. Aliev, S. Kanemitsu) On the metric theory of continued fractions; 77 (1998), 141-146.

A property of the unitary convolution; 78 (1998), 93-96.

## Schmidmeier, M.

The local duality for homomorphisms and an application to pure semisimple PI-rings; 77 (1998), 121–132.

### Schmoeger, C.

The spectral mapping theorem for the essential approximate point spectrum; 74 (1997), 167-176.

### Schoen, T.

(with T. Luczak) On strongly sum-free subsets of abelian groups; 71 (1996), 149–151. (with T. Luczak) Small bases for finite groups; 78 (1998), 35–37.

### Schwartz, A. L.

(with O. Gebuhrer) Sidon sets and Riesz sets for some measure algebras on the disk; 72 (1997), 269–279.

### Scott, R. A.

Projective embeddings of toric varieties; 80 (1999), 191–200.

### Şentürk, Z.

(with R. Deszcz, M. Hotloś) On the equivalence of the Ricci-pseudosymmetry and pseudosymmetry; 79 (1999), 211–227.

#### Setti, A. G.

(with M. Cowling, S. Meda) Invariant operators on function spaces on homogeneous trees; 80 (1999), 53–61.

### Shakhmatov, D. B.

(with V. G. Pestov) A relatively free topological group that is not varietal free; 77 (1998), 1–8.

### Shelah, S.

On full Suslin trees; 79 (1999), 1-7.

#### Shiratani, K.

(with M. Yamada) On rationality of Jacobi sums; 73 (1997), 251–260.

#### Si. J. G.

(with X. P. Wang) Analytic solutions of a second-order functional differential equation with a state derivative dependent delay; 79 (1999), 273–281.

### Sichler, J.

(with V. Koubek) Equimorphy in varieties of double Heyting algebras; 77 (1998), 41–58.

### Sikora, A

(with A. F. M. ter Elst, D. W. Robinson) Heat kernels and Riesz transforms on nilpotent Lie groups; 74 (1997), 191–218.

### Simão, I.

(with B. Maslowski) Asymptotic properties of stochastic semilinear equations by the method of lower measures; 72 (1997), 147–171.

### Simon, P.

Two-parameter multipliers on Hardy spaces; 77 (1998), 9–31.

### Simson, D

(with J. L. Garcia) On rings whose flat modules form a Grothendieck category; 73 (1997), 115-141.

(with R. Göbel) Embeddings of Kronecker modules into the category of prinjective modules and the endomorphism ring problem; 75 (1998), 213–244.

### Sjögren, P.

(with G. Gaudry) Singular integrals on the complex affine group; 75 (1998), 133-148.

#### Skibiński, P.

(with M. Frontczak, S. Spodzieja) Salomon's Theorem for polynomials with several parameters; 80 (1999), 107–114.

#### Skórnik, K.

(with J. Wloka) m-Reduction of ordinary differential equations; 78 (1998), 195–212.

### Skowroński, A.

(with H. Lenzing) Quasi-tilted algebras of canonical type; 71 (1996), 161–181.

Tame algebras with strongly simply connected Galois coverings; 72 (1997), 335–351.

(with G. Zwara) On the numbers of discrete indecomposable modules over tame algebras; 73 (1997), 93–114.

(with R. Nörenberg) Tame minimal non-polynomial growth simply connected algebras; 73 (1997), 301–330.

(with H. Lenzing) On selfinjective algebras of Euclidean type; 79 (1999), 71–76.

(with G. Bobiński) Geometry of modules over tame quasi-tilted algebras; 79 (1999), 85–118.

### Smith, P. F.

(with M. L. Galvão) Chain conditions in modular lattices; 76 (1998), 85–98.

#### Smoktunowicz, A.

A remark on Vapnik-Chervonienkis classes; 74 (1997), 93-98.

#### Soria, J.

(with M. J. Carro) Transference theory on Hardy and Sobolev spaces; 74 (1997), 47-69.

### Spearman, B. K.

(with J. G. Huard, K. S. Williams) On Pascal's triangle modulo  $p^2$ ; 74 (1997), 157–165.

### Spodzieja, S.

(with M. Frontczak, P. Skibiński) Salomon's Theorem for polynomials with several parameters; 80 (1999), 107–114.

### Stamou, G.

Regelflächen vom Weingarten-Typ; 79 (1999), 77-84.

### Strojnowski, A.

On residually finite groups and their generalizations; 79 (1999), 25–35.

### Sulaiman, W. T.

A general theorem covering many absolute summability methods; 80 (1999), 245–252.

### Święcicka, J.

(with A. Białynicki-Birula) A recipe for finding open subsets of vector spaces with a good quotient; 77 (1998), 97–114.

### Szwarc, R.

Norm estimates of discrete Schrödinger operators; 76 (1998), 153–160.

## Szyjewski, M.

On the Witt ring of a relative projective line; 75 (1998), 53–78.

### Szyszkowski, M.

On axial maps of the direct product of finite sets; 75 (1998), 33–37.

### Takahashi, J.

Limits of families of measure algebras; 78 (1998), 19–28.

### Takane, M.

(with J. A. de la Peña) Constructing the directing components of an algebra; 74 (1997), 29–46.

### Takeda, K.

(with Y. Ohnuki, K. Yamagata) Symmetric Hochschild extension algebras; 80 (1999), 155–174.

### Tamariz-Mascarúa, A.

(with M. Sanchis) On quasi-p-bounded subsets; 80 (1999), 175–189.

#### Tchamitchian, P.

(with P. Auscher, T. Coulhon) Absence de principe du maximum pour certaines équations paraboliques complexes; 71 (1996), 87–95.

### Teply, M. L.

(with B. Torrecillas) Weak Baer modules over graded rings; 75 (1998), 19-31.

### Torrecillas, B.

(with M. L. Teply) Weak Baer modules over graded rings; 75 (1998), 19–31.

#### Tralle, A.

On compact symplectic and Kählerian solvmanifolds which are not completely solvable; 73 (1997), 261–283.

### Tůma, J.

(with M. Ploščica, F. Wehrung) Congruence lattices of free lattices in non-distributive varieties; 76 (1998), 269–278.

### Tyc, A.

A decomposition theorem for complete comodule algebras over complete Hopf algebras; 74 (1997), 243–252.

An elementary proof of the Weitzenböck theorem; 78 (1998), 123–132.

### Tymchatyn, E. D.

(with K. Kawamura) Continua which admit no mean; 71 (1996), 97–105.

# Uehara, S.

A Hilbert cube compactification of the space of retractions of the interval; 78 (1998), 119–122.

### Urban, R.

Some remarks on the random walk on finite groups; 74 (1997), 287–298.

### Urbanik, K.

Moments of some random functionals; 74 (1997), 101–108.

### Urciuolo, M.

(with T. Godoy, L. Saal) On some singular integral operators close to the Hilbert transform; 72 (1997), 9–17.

(with E. Ferreyra, T. Godoy) Endpoint bounds for convolution operators with singular measures; 76 (1998), 35–47.

### Vaggione, D.

On the fundamental theorem of algebra; 73 (1997), 193–194; Errata, 77 (1998), 321.

### Valenta, H.

(with L. Angeleri Hügel) A duality result for almost split sequences; 80 (1999), 267–292.

#### Vanžura, J.

(with M. Čadek) On 4-fields and 4-distributions in 8-dimensional vector bundles over 8-complexes; 76 (1998), 213–228.

### Verstraelen, L.

(with F. Defever, R. Deszcz) On pseudosymmetric para-Kähler manifolds; 74 (1997), 253–260.

### Vinsonhaler, C.

(with A. Mader) The Idempotent Lifting Theorem for almost completely decomposable abelian groups; 72 (1997), 305–317.

### Wajch, E.

A little more on the product of two pseudocompact spaces; 71 (1996), 31-42.

### Wang, X. P.

(with J. G. Si) Analytic solutions of a second-order functional differential equation with a state derivative dependent delay; 79 (1999), 273–281.

#### Watson, S.

(with K. Ciesielski, D. Dikranjan) Functions characterized by images of sets; 77 (1998), 211–232.

## Wehrung, F.

(with M. Ploščica, J. Tůma) Congruence lattices of free lattices in non-distributive varieties; 76 (1998), 269–278.

(with G. Grätzer) Flat semilattices; 79 (1999), 185-191.

#### Weisz, F.

An extension of an inequality due to Stein and Lepingle; 71 (1996), 55–61.

Cesàro summability of one- and two-dimensional trigonometric-Fourier series; 74 (1997), 123-133.

### Welsh, S. C.

One-parameter global bifurcation in a multiparameter problem; 77 (1998), 85–96.

## Weyman, J.

The Grothendieck group of  $GL(F) \times GL(G)$ -equivariant modules over the coordinate ring of determinantal varieties; 76 (1998), 243–263.

(with J. Klimek, W. Kraśkiewicz) The Grothendieck group of G-equivariant modules over coordinate rings of G-orbits; 78 (1998), 105–118.

### Wheeden, R. L.

(with B. Franchi) Compensation couples and isoperimetric estimates for vector fields; 74 (1997), 9–27.

### Williams, G. H.

(with W. J. Liu) Exact Neumann boundary controllability for second order hyperbolic equations; 76 (1998), 117–142.

# Williams, K. S.

(with J. G. Huard, B. K. Spearman) On Pascal's triangle modulo  $p^2$ ; 74 (1997), 157–165.

### Wloka, J.

(with K. Skórnik) m-Reduction of ordinary differential equations; 78 (1998), 195-212.

### Wojciechowski, M.

(with W. Żelazko) Non-uniqueness of topology for algebras of polynomials; 72 (1997), 111–121.

### Worku, T.

(with C. Benson, J. Jenkins, G. Ratcliff) Spectra for Gelfand pairs associated with the Heisenberg group; 71 (1996), 305–328.

#### Wroński, A.

(with P. M. Idziak) Definability of principal congruences in equivalential algebras; 74 (1997), 225–238.

### Wrzosek, D.

(with Ph. Laurençot) The Becker-Döring model with diffusion. I. Basic properties of solutions; 75 (1998), 245-269.

### Wu, H. M.

(with M. H. Le) A note on the diophantine equation  $(x^2 - 1)(y^2 - 1) = (z^2 - 1)^2$ ; 71 (1996), 133–136.

#### Wu. J.-M.

Doubling measures with different bases; 76 (1998), 49–55.

### Wüstner, M.

On compact elements in solvable Lie groups; 74 (1997), 275–285.

### Yamada, M.

(with K. Shiratani) On rationality of Jacobi sums; 73 (1997), 251-260.

### Yamagata, K.

(with Y. Ohnuki, K. Takeda) Symmetric Hochschild extension algebras; 80 (1999), 155–174.

#### Yamagata, M.

(with M. Kon) Reduction of the codimension of a generic minimal submanifold immersed in a complex projective space; 74 (1997), 185–190.

### Yaprak, S.

(with K. Arslan, R. Deszcz) On Weyl pseudosymmetric hypersurfaces; 72 (1997), 353–361.

### Zabreĭko, P. P.

(with J. Appell, A. S. Kalitvin) Partial integral operators in Orlicz spaces with mixed norm; 78 (1998), 293–306.

# Zadrzyńska, E.

(with W. M. Zajączkowski) On nonstationary motion of a fixed mass of a viscous compressible barotropic fluid bounded by a free boundary; 79 (1999), 283–310.

### Zajączkowski, W. M.

(with E. Zadrzyńska) On nonstationary motion of a fixed mass of a viscous compressible barotropic fluid bounded by a free boundary; 79 (1999), 283–310.

## Zajíček, L.

Small non- $\sigma$ -porous sets in topologically complete metric spaces; 77 (1998), 293–304.

### Zakrzewski, P.

The uniqueness of Haar measure and set theory; 74 (1997), 109–121.

# Zanardo, P.

(with L. Fuchs, L. Salce) Note on the transitivity of pure essential extensions; 78 (1998), 283–291.

### Żelazko, W.

Concerning topologization of real or complex algebras; 71 (1996), 111-113.

(with M. Wojciechowski) Non-uniqueness of topology for algebras of polynomials; 72 (1997), 111-121.

A semitopological algebra without proper closed subalgebras; 74 (1997), 239–242.

### Zhang, Y. B.

(with I. Assem) Endomorphism algebras of exceptional sequences over path algebras of type  $\widetilde{\mathbb{A}}_n$ ; 77 (1998), 271–292.

### Zhou, G. Z.

(with S. P. Zhou) A remark on a modified Szász-Mirakjan operator; 79 (1999), 157-160.

## Zhou, S. P.

On approximation by Lagrange interpolating polynomials for a subset of the space of continuous functions; 75 (1998), 1–5.

Some remarks on rational Müntz approximation on  $[0, \infty)$ ; 77 (1998), 233–243.

(with G. Z. Zhou) A remark on a modified Szász-Mirakjan operator; 79 (1999), 157-160.

### Zieliński, L.

Charge transfer scattering in a constant electric field; 79 (1999), 37–61.

### Żuk, A.

A remark on the norm of a random walk on surface groups; 72 (1997), 195-206.

### Zwara, G.

Degenerations in the module varieties of generalized standard Auslander–Reiten components; 72 (1997), 281–303.

(with A. Skowroński) On the numbers of discrete indecomposable modules over tame algebras; 73 (1997), 93–114.

Degenerations for modules over representation-finite selfinjective algebras; 75 (1998), 91–95