

MATHEMATICAL PROCEEDINGS

(formerly Proceedings)

*of the
Cambridge Philosophical Society*

VOLUME 91



CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE

LONDON NEW YORK NEW ROCHELLE

MELBOURNE SYDNEY

1982

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, N.Y. 10022

© The Cambridge Philosophical Society 1982

Printed in Great Britain at the University Press, Cambridge

INDEX

	PAGE
Anyanwu, D. U. Langer's method for a second order linear ordinary differential equation with a second order pole	111
Apps, A. B. Boolean powers of groups	375
Archbold, R. J. Approximating maps and exact C^* -algebras	285
Brown, G. & Moran, W. Probability measures with trivial Stam groups	477
Brown, G., Karanikas, C. & Williamson, J. H. The assymetry of $M_0(G)$	407
Bryce, R. A. & Cossey, J. Subgroup closed fitting classes are formations	225
Buschman, R. G. & Srivastava, H. M. Series identities and reducibility of Kampé de Fériet functions	435
Carreras, F. J. Linear invariants of Riemannian almost product manifolds	99
Cohn, P. M. & Schofield, A. H. On the law of nullity	357
Cossey, J. & Bryce, R. A. Subgroup closed fitting classes are formations	225
Davies, R. O. & Tricot, C. A theorem about countable decomposability	457
Donkin, S. On the Hopf algebra dual of an enveloping algebra	215
Friedlander, J. B. Sifting short intervals	9
Giblin, P. J. & Hui, C. M. Specializations of complex quartic curves	171
Giblin, P. J. & Soares, M. G. Recognizing singularities of surfaces in CP^3	17
Globevnik, J. Norm preserving interpolation sets for polydisc algebras	291
Gomez-Larrañaga, J. C. Totally knotted knots are prime	467
Herrmann, M. & Orbanz, U. On equimultiplicity	207
Higgins, J. R. Some orthogonal and complete sets of Bessel functions associated with the vibrating plate	503
Hui, C. M. & Giblin, P. J. Specializations of complex quartic curves	171
Johnson, F. E. A. Locally symmetric homology spheres and an application of Matsu-shima's formula	459
Kalinowski, M. W. & Seweryński, M. Differential equation for Hermite–Bell poly-nomials	259
Karanikas, C., Brown, G. & Williamson, J. H. The assymetry of $M_0(G)$	407
Kassem, S. E. Multipole expansions for two superposed fluids, each of finite depth	323
Kelly, D. G. & Oxley, J. G. Asymptotic properties of random subsets of projective spaces	119
Kuttner, B. Absolute summability functions for Hausdorff methods	51
Kwee, B. On the converse of absolute Abel summability.	453
Little, G. Asymptotic estimates of the eigenvalues of certain positive Fredholm operators	267
Livingston, C. More 3-manifolds with multiple knot-surgery and branched-cover descriptions	473
McMullen, P. The volume of certain convex sets	91
Mason, J. R. M. On the maximum sizes of certain (k, n) -arcs in finite projective geometries	153
Melvin, P. Tori in the diffeomorphism groups of simply-connected 4-manifolds	305
Mond, D. On the tangent developable of a space curve	351
Moran, W. & Brown, G. Probability measures with trivial Stam groups	477
Newstead, P. E. Quadratic Complexes. II	183
Orbanz, U. & Herrmann, M. On equimultiplicity	207

	PAGE
Oxley, J. G. & Kelly, D. G. Asymptotic properties of random subsets of projective spaces	119
Radcliffe, J., Rass, L. & Stirling, W. D. Wave solutions for the deterministic host-vector epidemic	131
Rass, L., Stirling, W. D. & Radcliffe, J. Wave solutions for the deterministic host-vector epidemic	131
Reddy, B. D. Surface instabilities on an equibiaxially stretched elastic half-space	491
Riedel, N. On the Dixmier property of simple C^* -algebras	75
Rippon, P. J. A boundary estimate for harmonic functions	79
Ruberman, D. Imbedding four-manifolds and slicing links	107
Schafir, R. L. The Variational Principle and natural transformations. II. Time dependent theory	331
Schenzel, P. Cohomological annihilators	345
Schofield, A. H. & Cohn, P. M. On the law of nullity	357
Sealey, H. C. J. Some conditions ensuring the vanishing of harmonic differential forms with applications to harmonic maps and Yang–Mills theory	441
Seweryński, M. & Kalinowski, M. W. Differential equation for Hermite–Bell polynomials	259
Small, C. Random uniform triangles and the alignment problem	315
Soares, M. G. & Giblin, P. J. Recognizing singularities of surfaces in $\mathbb{C}P^3$	17
Srivastava, H. M. & Buschman, R. G. Series Identities and reducibility of Kampé de Fériet functions	435
Stafford, J. T. Homological properties of the enveloping algebra $U(Sl_2)$	29
Stirling, W. D., Radcliffe, J. & Rass, L. Wave solutions for the deterministic host-vector epidemic	131
Tahara, K.-I. Augmentation quotients and dimension subgroups of semidirect products of groups	39
Tricot, C. Two definitions of fractional dimension	57
Tricot, C. & Davies, R. O. A theorem about countable decomposability	457
Tu, G-Z. On polynomial symmetries of sine-Gordon equation	485
Wehrfritz, B. A. F. Groups whose irreducible representations have finite degree III	397
Williamson, J. H., Karanikas, C. & Brown, G. The assymetry of $M_0(G)$	407
Wilson, B. J. Incompleteness of $(nq + n - q - 2, n)$ -arcs in finite projective planes of even order	1

CAMBRIDGE PHILOSOPHICAL SOCIETY

AUTHOR INDEX
TO
MATHEMATICAL
PROCEEDINGS

VOLUMES 81 TO 90
(1977–1981)

CAMBRIDGE
1982

PREFACE

The first cumulative index to the Proceedings of the Cambridge Philosophical Society was published in 1961 and entitled *Author Index to Proceedings of the Cambridge Philosophical Society Volumes 1 to 50 (1843–1954), and Transactions of the Cambridge Philosophical Society Volumes 1 to 23 (1822–1928)*. An Index covering the Proceedings Volumes 51 to 60 (1955–1964) was published in 1967 and one covering Volumes 61 to 70 (1965–1971) in 1972.

An index covering the Proceedings Volumes 71–76 (1972–1974) and, after the change of title, the Mathematical Proceedings Volumes 77 to 80 (1975–1976) was published in 1977.

The present Index covers the Mathematical Proceedings Volumes 81 to 90 (1977–1981).

INDEX OF AUTHORS

- ADAMS, J. F., LIN, W.-H., DAVIS, D. M. & MAHOWALD, M. E. Calculation of Lin's Ext groups. **87** (1980) 495-469
- ADEROGBA, K. The determination of thermal stresses in dissimilar media. **89** (1981) 533-542
- ADRANGHI, M. R. & KIRBY, D. A Lattice of extension rings for a commutative ring. **84** (1978) 225-235
- AHLSWEDE, R. & DAYKIN, D. E. Integral inequalities for increasing functions. **86** (1979) 391-394
- AKBULUT, S. A note on homology surgery and the Casson-Gordon invariant. **85** (1979) 335-344
On the 2-dimensional homology classes of 4-manifolds. **82** (1977) 99-106
- ALDOUS, D. J. On \bar{d} -convergence of Markov chains. **90** (1981) 331-333
Unconditional bases and martingales in $L_p(F)$. **85** (1979) 117-123
Weak convergence of randomly indexed sequences of random variables. **83** (1978) 117-126
- ALEXANDER, J. C. & FITZPATRICK, P. M. Galerkin approximations in several parameter bifurcation problems. **87** (1980) 489-500
- ALLARD, J. Sums of stably trivial vector bundles. **87** (1980) 97-107
- ALLWRIGHT, D. J. Harmonic balance and the Hopf bifurcation **82** (1977) 453-461
- ANDERSON, C. W. Local limit theorems for the maxima of discrete random variables. **88** (1980) 161-165
- ANG, D. D. & HOA, L. H. On triangle contractive operators in Hilbert spaces. **85** (1979) 17-20
- ARCHBOLD, R. J. On the Dixmier property of certain algebras. **86** (1979) 251-259.
On the norm of an inner derivation of a C^* -algebra. **84** (1978) 273-291
- ARMITAGE, D. H. On harmonic functions which take integer values on integer lattices. **85** (1979) 69-77
- ARMS, J. M. The structure of the solution set for the Yang-Mills equations. **90** (1981) 361-372
- ATKINSON, C. & BOUILLET, J. E. Some qualitative properties of solutions of a generalised diffusion equation. **86** (1979) 495-510
- AUSLANDER, J. & DOWKER, Y. N. On the disjointness of dynamical systems. **85** (1979) 477-491
- BACHMAN, R. C. & COHEN, H. Wave propagation in elastic rods with multiple wave speeds. **86** (1979) 179-191
- BADDELEY, A. J. Absolute curvatures in integral geometry. **88** (1980) 45-58
- BAERSTEIN, A. II & ROCHBERG, R. Means and coefficients of functions which omit a sequence of values. **18** (1977) 47-57
- BAKER, J. W. & MILNES, P. The ideal structure of the Stone-Ćech compactification of a group. **82** (1977) 401-409
- BAKER, R. On numbers with many rational approximations. **86** (1979) 25-27
- BAKER, R. C. Dirichlet's theorem on diophantine approximation. **83** (1978) 37-59
Singular n -tuples and Hausdorff dimension. **81** (1977) 377-385
- BAKER, R. C. & HARMAN, G. Small fractional parts of quadratic and additive forms. **90** (1981) 5-12
- BALL, J. M. Strict convexity, strong ellipticity and regularity in the calculus of variations. **87** (1980) 501-513
- BARBOUR, A. D. On sequential versions of the generalized likelihood ratio test. **86** (1979) 85-90
The uniqueness of Atkinson and Reuter's epidemic waves. **82** (1977) 127-130
- BARNES, E. S. & MATHER, M. The number of non-homogeneous lattice points in subsets of R^n . **82** (1977) 265-268
- BARSKY, D. On Morita's p -adic gamma function. **89** (1981) 23-27
- BASSANI, J. L., DURBAN, D. & HUTCHINSON, J. W. Bifurcations at a spherical hole in an infinite elastoplastic medium. **87** (1980) 339-356
- BATSON, V. J. Two inequalities for the complete symmetric functions. **84** (1978) 1-3
- BASU, S. K. A non-uniform rate of convergence in a local limit theorem. **84** (1978) 351-361
- BASU, S. K. & MAEJIMA, M. A local limit theorem for attractions under a stable law. **87** (1980) 179-187
- BATTY, C. J. K. Fubini and martingale theorems in C^* -algebras. **86** (1979) 57-69
Tensor products of compact convex sets and Banach algebras. **83** (1978) 419-427

- BAUMSLAG, B. & PRIDE, S. J. An extension of the Freiheitssatz. 89 (1981) 35–41
- BAYER, E., HILLMAN, J. A. & KEARTON, C. The factorization of simple knots. 90 (1981) 495–506
- BECKER, R. I. Existence of solutions of Hammerstein equations of compact type. 89 (1981) 149–158
- BEDFORD, J. C. & GIBSON, C. G. On stratifying 3-jets of functions. 82 (1977) 389–400
- BEEM, J. K. & EHRLICH, P. E. Conformal deformations, Ricci curvature and energy conditions on globally hyperbolic spacetimes. 84 (1978) 159–175
Constructing maximal geodesics in strongly causal space-times. 90 (1981) 183–190
Cut points, conjugate points and Lorentzian comparison theorems. 86 (1979) 365–384
Singularities, incompleteness and the Lorentzian distance function. 85 (1979) 161–178
- BELLENOT, S. F. & OSTLING, E. G. Completeness and intertwined completeness of locally convex spaces. 81 (1977) 25–30
- BERNAU, S. J. Orthomorphisms of archimedean vector lattices. 89 (1981) 119–128
- BERRICK, A. J. The Smale invariants of an immersed projective space. 86 (1979) 401–411
- BEUKERS, F. Fractional parts of powers of rationals. 90 (1981) 13–20
- BEYNON, W. M. Vector lattices freely generated by distributive lattices. 81 (1977) 193–200
- BEYNON, W. M. & LUSZTIG, G. Some numerical results on the characters of exceptional Weyl groups. 84 (1978) 417–427
- BHAGWAT, K. V. & SUBRAMANIAN, R. Inequalities between means of positive operators. 83 (1978) 393–401
- BIGGINS, J. D. & SHANBHAG, D. N. Some divisibility problems in branching processes. 90 (1981) 321–330
- BIGGS, N. L. & ITO, T. Graphs with even girth and small excess. 88 (1980) 1–10
- BIJAN-ZADEH, M. H. & SHARP, R. Y. On Grothendieck's local duality theorem. 85 (1979) 431–437
- BOLLOBÁS, B. Martingale inequalities. 87 (1980) 377–382
Threshold functions for small subgraphs. 90 (1981) 197–206
- BONSALL, F. F. Jordan algebras spanned by Hermitian elements of a Banach algebra. 81 (1977) 3–13.
- BOUILLET, J. E. & ATKINSON, C. Some qualitative properties of solutions of a generalised diffusion equation. 86 (1979) 495–510
- BRAKES, W. R. Canonical extensions for embeddings of topological spheres of any co-dimension. 81 (1977) 15–24
Manifolds with multiple knot-surgery descriptions. 87 (1980) 443–448
On certain non-trivial ribbon knots. 87 (1980) 207–211
- BRAMSON, M. & GRIFFEATH, D. On the Williams-Bjerknes tumour growth model II. 88 (1980) 339–357
- BRAMWELL, D. A note on k -3 caps in three dimensional Galois space. 86 (1979) 21–23
- BREMNER, A. Some cubic surfaces with no rational points. 84 (1978) 219–225
- BRESSOUD, D. M. Some identities for terminating q -series. 89 (1981) 211–223
- BRITTON, J. L. Integer solutions of systems of quadratic equations. 86 (1979) 385–389
- BRODMANN, M. The asymptotic nature of the analytic spread. 86 (1979) 35–39
- BROWN, E. H. Jr., DAVIS, D. M. & PETERSON, F. P. The homology of BO and some results about the Steenrod algebra. 81 (1977) 393–398
- BROWN, G. Singular infinitely divisible distributions whose characteristic functions vanish at infinity. 82 (1977) 277–287
- BROWN, K. A. The structure of modules over polycyclic groups. 89 (1981) 257–283
- BROWN, K. J. & CARR, J. Deterministic epidemic waves of critical velocity. 81 (1977) 431–433
- BROWN, T. C. Compensators and Cox convergence. 90 (1981) 305–319
- BROWNE, P. J. & SLEEMAN, B. D. Applications of multiparameter spectral theory to special functions. 87 (1980) 275–283
- BRUCE, J. W. A stratification of the space of cubic surfaces. 87 (1980) 427–441
Canonical stratification of functions: the simple singularities. 88 (1980) 265–272
On generic hypersurfaces in R^n . 90 (1981) 389–394
On singularities, envelopes and elementary differential geometry. 89 (1981) 43–48
Stratifying jet spaces – some special cases. 85 (1979) 439–444
- BRUCE, J. W. & GIBLIN, P. J. On real simple singularities. 88 (1980) 273–279
- BRYANT, J. L. & LACHER, R. C. Resolving acyclic images of three-manifolds. 88 (1980) 311–319
Resolving zero-dimensional singularities in generalized manifolds 83 (1978) 403–413
- BRYCE, R. A. & COSSEY, J. Subgroup closed Fitting classes. 83 (1978) 195–204
- BUDDEN, P. J. & NORBURY, J. Sluice-gate problems with gravity. 81 (1977) 157–175
- BURCH, A. L. A theorem on integral closures of ideals in semi-local rings. 85 (1979) 55–59

- BURGESS, D. C. J. & FITZPATRICK, M. Locally convex syntopogeneous spaces. 85 (1979) 445–448
 On separation axioms for certain types of ordered-topological space. 82 (1977) 59–65
 Syntopogeneous preordered spaces (II). 83 (1978) 19–24
- BURKILL, H. Sequences characterizing the sine function. 89 (1981) 71–77
 Universal matrices. 85 (1979) 193–198
- BURN, R. P. Finite Bol loops. 84 (1978) 377–385
 Finite Bol loops II. 89 (1981) 445–455
- CALLADINE, C. R. The ‘static-geometric analogy’ in the equations of thin shell structures. 82 (1977) 335–351
- CALLAHAN, J. The double cusp has five minima. 84 (1978) 537–538
- CALVERT, I. On the closure of a class of subsets of the real line. 83 (1978) 181–182
- CARNE, T. K. Not all H^* -algebras are operator algebras. 86 (1979) 243–249
 Representation theory for tensor products of Banach algebras. 90 (1981) 445–463
- CARNE, T. K. & TONGE, A. M. The injective tensor product of \mathcal{L}_p -algebras. 83 (1978) 237–242
- CARR, J. & BROWN, K. J. Deterministic epidemic waves of critical velocity. 81 (1977) 431–433
- CARTER, M. R. Bounds for the solution of a non-linear parabolic initial-boundary value problem. 82 (1977) 131–145
- CARTER, R. W. & PAYNE, M. T. J. On homomorphisms between Weyl modules and Specht modules. 87 (1980) 419–425
- CHATTERJEE, A. K., MAL, A. K., KNOPOFF, L. & HUDSON, J. A. Attenuation of elastic waves in a cracked, fluid-saturated solid. 88 (1980) 547–561
- CHAUDHURI, R. & MUKHERJEA, A. Convergence of non-homogeneous stochastic chains II. 90 (1981) 167–182
- CHENEY, E. W. & LIGHT, W. A. Some best-approximation theorems in tensor-product spaces. 89 (1981) 385–390
- CHENG, K.-S. & NI, W.-T. Conditions for the local existence of metric in a generic affine manifold. 87 (1980) 527–534
- CHEW, W. C. & KONG, J. A. Asymptotic formula for the capacitance of two oppositely charged discs. 89 (1981) 373–384
- CHILLINGWORTH, D. R. J. Collapsing three-dimensional convex polyhedra: correction. 88 (1980) 307–310
- CHISWELL, I. M. Embedding theorems for groups with an integer-valued length function. 85 (1979) 417–429
- CLARKE, C. J. S. On the differentiability of space-time. 81 (1977) 279–282
- CLARKE, F. Self maps of BU. 89 (1981) 491–500
- CLEAVE, J. P. Generic bifurcations of forced oscillations of integrable mechanical systems. 85 (1979) 125–142
 The form of the tangent-developable at points of zero torsion on space curves. 88 (1980) 403–407
- COHEN, F. R., MAY, J. P. & TAYLOR, L. Splitting of certain spaces CX . 84 (1978) 465–496
 Splitting of some more spaces. 86 (1979) 227–236
- COHEN, H. & BACHMAN, R. C. Wave propagation in elastic rods with multiple wave speeds. 86 (1979) 179–191
- COHEN, J. E. Contractive inhomogeneous products of non-negative matrices. 86 (1979) 351–364
 Derivatives of the spectral radius as a function of non-negative matrix elements. 83 (1978) 183–190
 Random evolutions and the spectral radius of a non-negative matrix. 86 (1979) 345–350
- COHEN, J. M. On the Hurwitz extensions by $PSL_2(7)$. 86 (1979) 395–400
- COHEN, R. L. Stable proofs of stable splittings. 88 (1980) 149–151
- CONNELLY, R. & HENDERSON, D. W. A convex 3-complex not simplicially isomorphic to a strictly convex complex. 88 (1980) 299–306
- COSSEY, J. & BRYCE, R. A. Subgroup closed Fitting classes. 83 (1978) 195–204
- COWAN, R. Homogeneous line-segment processes. 86 (1979) 481–489
- CROFT, H. T. Convex curves in which a triangle can revolve. 88 (1980) 385–393
 Cushions, cigars and diamonds: an area-perimeter problem for symmetric ovals. 85 (1979) 1–16
- CROFT, H. T. & FALCONER, K. J. On maximal Euclidean sets avoiding certain distance configurations. 89 (1981) 79–88
- CROSS, R. W. Unilateral quasi-regularizers of closed operators. 87 (1980) 471–480
- CsÖRGÖ, M. & RYCHLIK, Z. Weak convergence of sequences of random elements with random indices. 88 (1980) 171–174

- CURTIS, R. T. The maximal subgroups of M_{24} . 81 (1977) 185–192
- DALEY, D. J. Lattice-valued random walks with Markov chain dependent steps. 86 (1979) 115–126
- DALLA, L. & LARMAN, D. G. Convex bodies with almost all k -dimensional sections polytopes. 88 (1980) 395–401
- DAMERELL, R. M. On Moore geometries. II. 90 (1981) 33–40
- DAMON, J. Topological properties of real simple germs, curves and the nice dimensions $n > p$. 89 (1981) 457–471
- DANIELS, P. G. & STEWARTSON, K. On the spatial oscillations of a horizontally heated rotating fluid. 81 (1977) 325–349
Overstable convection in a horizontally heated rotating fluid. 83 (1978) 329–345
- DAS, G. & MISHRA, S. K. A note on a theorem of Maddox on strong almost convergence. 89 (1981) 393–396
- DAVIES, E. B. Classical approximations to Gibbs states. 86 (1979) 521–527
Scattering from infinite sheets. 82 (1977) 327–334
- DAVIS, D. M., MAHOWALD, M. E., ADAMS, J. F. & LIN, W.-H. Calculation of Lin's Ext groups. 87 (1980) 459–469
- DAVIS, D. M., PETERSON, F. P. & BROWN, E. H. Jr. The homology of BO and some results about the Steenrod algebra. 81 (1977) 393–398
- DAVIS, M. H. A. Functionals of diffusion processes as stochastic integrals. 87 (1980) 157–166
- DAYKIN, D. E. & AHLWEDE, R. Integral inequalities for increasing functions. 86 (1979) 391–394
- DENKEL, N. & FISHEL, B. Reducibility of differential operators: some examples. 86 (1979) 29–33
- DITZIAN, Z. Lipchitz classes and convolution approximation processes. 90 (1981) 51–61
- DIXON, P. G. Spectra of approximate identities in Banach algebras. 86 (1979) 271–278
- DODSON, C. T. J. & SULLEY, L. J. On bundle completion of parallelizable manifolds. 87 (1980) 523–525
- DODSON, C. T. J., SULLEY, L. J. & WILLIAMS, P. M. An acceleration condition for b -incomplete timelike curves. 90 (1981) 191–193
- DOMAN, B. G. S. & WILLIAMS, J. K. Fibonacci and Lucas polynomials. 90 (1981) 385–387
- DOMB, C. A generalization of the Konigsberg bridges problem. 82 (1977) 1–4
- DOR, L. E. Some inequalities for martingales and applications to the study of L_1 . 89 (1981) 135–148
- DORO, S. Simple Moufang loops. 83 (1978) 377–392
- DOWKER, Y. N. & AUSLANDER, J. On the disjointness of dynamical systems. 85 (1979) 447–491
- DRIESSLER, W. & WILDE, I. F. Stochastic independence in non-commutative probability theory. 86 (1979) 103–114
- DURBAN, D. On the differentiation of tensor functions. 83 (1978) 289–297
- DURBAN, D., HUTCHINSON, J. W. & BASSANI, J. L. Bifurcations at a spherical hole in an infinite elastoplastic medium. 87 (1980) 339–356
- DZINTOYIWEYI, H. A. M. Algebras of measures of C -distinguished topological semigroups. 84 (1978) 323–337
- EAGLESON, G. K. & WEBER, N. C. Limit theorems for weakly exchangeable arrays. 84 (1978) 123–130
- ECCLES, P. J. Codimension one immersions and the Kervaire invariant one problem. 90 (1981) 483–493
Multiple points of codimension one immersions of oriented manifolds. 87 (1980) 213–220
- EDGE, W. L. A pencil of four-nodal plane sextics. 89 (1981) 413–421
A pencil of specialized canonical curves. 90 (1981) 239–249
The scroll of tangents of an elliptic quartic curve. 86 (1979) 1–11
- EDMUNDS, C. C. On words of minimal length under endomorphisms of a free group. 83 (1978) 191–194
- EDMUNDS, D. E. & WEBB, J. R. L. Some generalisations of the Borsuk-Ulam theorem. 82 (1977) 119–125
- EDWARDS, C. M. On the centres of hereditary JBW-subalgebras of a JBW-algebra. 85 (1979) 317–324
- EHRlich, P. E. & BEEM, J. K. Conformal deformations, Ricci curvature and energy conditions on globally hyperbolic spacetimes. 84 (1978) 159–175
Constructing maximal geodesics in strongly causal space-times. 90 (1981) 183–190

- Cut points, conjugate points, and Lorentzian comparison theorems. 86 (1979) 365–383
 Singularities, incompleteness and the Lorentzian distance function. 85 (1979) 161–178
- ELLIOTT, R. J. Innovation projections of a jump process and local martingales. 81 (1977) 77–90
- ELLS, A. J. Weakly prime compact convex sets and uniform algebras. 81 (1977) 225–232
- ERBACH, D. W. The non-existence of a certain finite projective plane. 82 (1977) 5–12
- ERDÖS, P., MILNER, E. C. & RADO, R. Corrigenda. Families of sets whose pairwise intersections have prescribed cardinals or order types. 81 (1977) 522
- EZEILO, J. O. C. A further instability theorem for a certain fifth order differential equation. 86 (1979) 491–493
 Instability theorems for certain fifth order differential equations. 84 (1978) 343–351
- FALCONER, K. J. Applications of outwardly simple line families to plane convex sets. 82 (1977) 353–356
 Consistency conditions for a finite set of projections of a function. 85 (1979) 61–68
 Continuity properties of k -plane integrals and Besicovitch sets. 87 (1980) 221–226
 Function space topologies defined by sectional integrals and applications to an extremal problem. 87 (1980) 81–96
 On the convergence of certain singular integrals. 89 (1981) 397–403
 The determination of a function from its projections. 85 (1979) 351–355
- FALCONER, K. J. & CROFT, H. T. On maximal Euclidean sets avoiding certain distance configurations. 89 (1981) 79–88
- FARMER, M. R. & LOIZOU, G. An algorithm for the total, or partial, factorisation of a polynomial. 82 (1977) 427–437
- FEDORČUK, V. V. A compact space of cardinality of the continuum with no convergent sequences. 81 (1977) 177–181
- FINK, J. P. The Pettis integration of a perturbed wave equation. 86 (1979) 145–159
- FIORINI, S. On the edge-reconstruction of planar graphs. 83 (1978) 31–35
- FISHEL, B. & DENKEL, N. Reducibility of differential operators: some examples. 86 (1979) 29–33
- FITZ-GERALD, G. F. & GRIMSHAW, R. H. J. A note on the uniqueness of small-amplitude water waves travelling in a region of varying depth. 86 (1979) 511–519
- FITZPATRICK, P. M. On nonlinear perturbations of linear second order elliptic boundary value problems. 84 (1978) 143–157
- FITZPATRICK, P. M. & ALEXANDER, J. A. Galerkin approximations in several parameter bifurcation problems. 87 (1980) 489–500
- FITZPATRICK, M. & BURGESS, D. C. J. Locally convex syntopogeneous spaces. 85 (1979) 445–448
 On separation axioms for certain types of ordered topological space. 82 (1977) 59–65
 Syntopogeneous preordered spaces (II). 83 (1978) 19–24
- FLAHERTY, F. J. Comersions and 1-connectedness. 81 (1977) 143–147
- FÖRSTER, P. Closure operations for Schunck classes and formations of finite solvable groups. 85 (1979) 253–259.
- FRAENKEL, L. E. A numerical sequence and a family of polynomials arising from a question of completeness. 88 (1980) 469–481
 Completeness properties in L_2 of the eigenfunctions of two semi-linear differential operators. 88 (1980) 451–468
 Formulae for high derivatives of composite functions. 83 (1978) 159–165
- FREMLIN, D. H. Riesz spaces with the order-continuity property. I. 81 (1977) 31–42.
 Riesz spaces with the order-continuity property. II. 83 (1978) 211–223
- FRIDY, J. A. A simple proof of the Mazur-Orlicz summability theorem. 89 (1981) 391–392
- FRIEDLANDER, E. M. The infinite loop Adams conjecture via classification theorems for \mathcal{F} -spaces. 87 (1980) 109–150
- FRIEDLANDER, F. G. Multi-valued solutions of the wave equation. 90 (1981) 335–341
 Radiation fields and hyperbolic scattering theory. 88 (1980) 483–515
- FRIEDLANDER, F. G. & MELROSE, R. B. The wave front set of the solution of a simple initial-boundary value problem with glancing rays. II. 81 (1977) 97–120
- FRYDMAN, H. The embedding problem for Markov chains with three states. 87 (1980) 285–294
- FRYDMAN, H. & SINGER, B. Total positivity and the embedding problem for Markov chains. 86 (1979) 339–344
- GALEWSKI, D. E. & STERN, R. J. Orientation-reversing involutions on homology 3-spheres. 85 (1979) 449–451

- GARBER, V. On the iteration of rational and entire functions. **84** (1978) 497–505
- GARLING, D. J. H. Subsequence principles for vector-valued random variables. **86** (1979) 301–311
- GASPAR, Z. & THOMPSON, J. M. T. A buckling model for the set of umbilic catastrophes. **82** (1977) 497–507
- GAUDRY, G. I. Littlewood-Paley theorems for sum and difference sets. **83** (1978) 65–71
- GERHARD, J. A. The word problem for semigroups satisfying $x^3 = x$ **84** (1978) 11–19
- GIBLIN, P. J. & BRUCE, J. W. On real simple singularities. **88** (1980) 273–279
- GIBSON, C. G. & BEDFORD, J. C. On stratifying 3-jets of functions. **82** (1977) 389–400
- GIBSON, C. G. & JOHNS, D. L. A constructive approach to the duality theorem for certain Orlicz spaces. **89** (1981) 49–69
- GILBERT, A. D. A geometric approach to two-timing. **87** (1980) 167–178
- GILBERT, R. C. Shearing transformation of a linear system at an irregular singular point. **89** (1981) 159–166
- GILLIS, J. & KLEEMAN, J. A combinatorial proof of a positivity result. **86** (1979) 13–19
- GLASS, A. M. W., GUREVICH, Y., HOLLAND, W. C. & SHELAH, S. Rigid homogeneous chains. **89** (1981) 7–17
- GLOBEVNIK, J. Boundaries for polydisc algebras in infinite dimensions. **85** (1979) 291–303
On interpolation by analytic maps in infinite dimensions. **83** (1978) 243–252
- GODAMBE, A. V. On representation of Poisson mixtures as Poisson sums and a characterization of the gamma distribution. **83** (1977) 297–300
- GODDARD, A. J. Some remarks on the existence of spacelike hypersurfaces of constant mean curvature. **82** (1977) 489–495
- GORDON, C. MCA. Homology of groups of surfaces in the 4-sphere. **89** (1981) 113–117.
- GORDON, T. J. Conserved currents of the Klein-Gordon field. **90** (1981) 507–515
- GORGUI, M. A. & KASSEM, S. E. On the generation of short internal waves by cylinders oscillating at the surface separating two infinite liquids. **83** (1978) 481–494
- GOW, R. Representations and automorphisms of some wreath products. **85** (1979) 49–53
- GREEN, A. E. & NAGHDI, P. M. On non-local continuum mechanics. **83** (1978) 307–319.
- GREEN, M. D. The lattice structure of C^* -algebras and their duals. **81** (1977) 245–248
- GREGORY, R. D. A circular disc containing a radial edge crack opened by a constant internal pressure. **81** (1977) 497–521
The edge-cracked circular disc under symmetric pin-loading. **85** (1979) 523–538
- GRIFFEATH, D. & BRAMSON, M. On the Williams-Bjerknes tumour growth model. II. **88** (1980) 339–357
- GRIMSHAW, R. H. J. & FITZ-GERALD, G. F. A note on the uniqueness of small-amplitude water waves travelling in a region of varying depth. **86** (1979) 511–519
- GROENVELD, J. & VAN KAMPEN, N. G. A simple proof of an identity of Good. **81** (1977) 183–184
- GRÜNBAUM, B. & SHEPHERD, G. C. The eighty-one types of isohedral tilings in the plane. **82** (1977) 177–196
- GRUNEWALD, F. & SEGAL, D. On polycyclic groups with isomorphic finite quotients. **84** (1978) 235–247
- GRUNEWALD, F. J. & SEGAL, D. How to solve a quadratic equation in integers. **89** (1981) 1–5
- GUREVICH, Y., HOLLAND, W. C., SHELAH, S. & GLASS, A. M. W. Rigid homogeneous chains. **89** (1981) 7–17
- HAIGH, J. Essential geometric morphisms between toposes over finite sets. **87** (1980) 21–24
- HALL, J. E. & SHARP, R. Y. Dualizing complexes and flat homomorphisms of commutative Noetherian rings. **84** (1978) 37–45.
- HALL, P. Characterizing the rate of convergence in the central limit theorem. II. **89** (1981) 511–523
On the duality between the behaviour of sums of independent random variables and the sums of their squares. **84** (1978) 117–121.
On the L^p convergence of sums of independent random variables. **82** (1977) 439–446
On the relative stability of large order statistics. **86** (1979) 467–475
- HAMMERSLEY, J. M. A generalization of McDiarmid's theorem for mixed Bernoulli percolation. **88** (1980) 167–170
- HANNABUSS, K. C. Characters and contact transformations. **90** (1981) 465–476
- HANSEN, I. On Adams' splitting of K-theory and complex cobordism. **83** (1978) 113–116
- HARARY, F. & PALMER, E. M. The probability that a point of a tree is fixed. **85** (1979) 407–415
- HARMAN, G. & BAKER, R. C. Small fractional parts of quadratic and additive forms. **90** (1981) 5–12.

- HARPER, D. L. Primitive irreducible representations of nilpotent groups. 82 (1977) 241–247
 Primitivity in representations of polycyclic groups. 88 (1980) 15–31
- HARTLEY, B. A dual approach to Černikov modules. 82 (1977) 215–239
- HAUGHTON, D. M. & OGDEN, R. W. Bifurcation of rotating circular cylindrical elastic membranes. 87 (1980) 357–376
- HAWKES, J. Multiple points for symmetric Lévy processes. 83 (1978) 83–90
 On the asymptotic behaviour of sample spacings. 90 (1981) 293–303
- HAYDEN, J. & ZEEMAN, E. C. A Lagrangian Klein bottle. 89 (1981) 193–200
- HAYMAN, W. K., PATTERSON, S. J. & POMMERENKE, CH. On the coefficients of certain automorphic functions. 82 (1977) 357–367
- HEADING, J. Deductions from some artificial refractive index profiles based on the elementary functions. 81 (1977) 121–132
 Generalized approximate methods for transmission through a barrier governed by a differential equation of order $2n$. 85 (1979) 361–377
 Properties of two-way transmission in generalized wave propagation problems. 82 (1977) 485–488
- HEATH-BROWN, D. H. Almost-primes in arithmetic progressions and short intervals. 83 (1978) 357–375
- HEATH-BROWN, D. R. Representation of an integer as a prime plus a product of two small factors. 89 (1981) 29–33
- HEINS, A. E. The fundamental solution for the axially symmetric wave-equation II. 87 (1980) 515–521
- HENDERSON, D. W. & CONNELLY, R. A convex 3-complex not simplicially isomorphic to a strictly convex complex. 88 (1980) 299–306
- HERING, H. Refined positivity theorem for semigroups generated by perturbed differential operators of second order with an application to Markov branching processes. 83 (1978) 253–259
 Uniform primitivity of semigroups generated by perturbed elliptic differential operators. 83 (1978) 261–268
- HICKIN, K. K., PHILLIPS, R. E. & PLOTKIN, J. M. Periodic groups generated by finite amalgams. 87 (1980) 189–197
- HILL, R. Basic stress analysis of hyperbolic regimes in plastic media. 88 (1980) 359–369
 Invariance relations in thermoelasticity with generalized variables. 90 (1981) 373–384
 On the theory of plane strain in finitely deformed compressible materials. 86 (1979) 161–178
 Some results concerning linear codes and $(k, 3)$ -caps in 3-dimensional Galois space. 84 (1978) 191–207
 Theoretical plasticity of textured aggregates. 85 (1979) 179–191
- HILLMAN, J. A. The Torres conditions are insufficient. 89 (1981) 19–22
- HILLMAN, J. A., KEARTON, C. & BAYER, E. The factorization of simple knots. 90 (1981) 495–506
- HILTON, P., ROITBERG, J. & SINGER, D. On G-spaces, Serre classes and G-nilpotency. 84 (1978) 443–453
- HITCHIN, N. J. Polygons and gravitons. 85 (1979) 465–476
- HOA, L. H. & ANG, D. D. On triangle contractive operators in Hilbert spaces. 85 (1979) 17–20
- HOARE, A. H. M. On lifting Fuchsian groups. 87 (1980) 61–67
- HOLLAND, W. C., SHELAK, S., GLASS, A. M. W. & GUREVICH, Y. Rigid homogeneous chains. 89 (1981) 7–17
- HOOVER, N. D. Lomonosov's hyperinvariant subspace theorem for real spaces. 89 (1981) 129–133
- HUBBUCK, J. R. Mod p associative H-spaces of given rank. 88 (1980) 153–160
- HUDSON, J. A. Overall properties of a cracked solid. 88 (1980) 371–384
- HUDSON, J. A., CHATTERJEE, A. K., MAL, A. K. & KNOPOFF, L. Attenuation of elastic waves in a cracked, fluid-saturated solid. 88 (1980) 547–561
- HUMPHREYS, J. F. Rational projective representations of finite groups. 86 (1979) 413–419
 The projective characters of the Mathieu group M_{12} and of its automorphism group. 87 (1980) 401–412
- HUNTER, D. B. The positive-definiteness of the complete symmetric functions of even order. 82 (1977) 255–258
- HUNTER, R. J. & LLOYD, J. W. Eberlein compacts and spaces of continuous functions. 85 (1979) 305–313
 Weakly compactly generated locally convex spaces. 82 (1977) 85–98

- HURLEY, B. On length functions and normal forms in groups. **84** (1978) 455–464
- HUTCHINSON, J. W., BASSANI, S. L. & DURBAN, D. Bifurcations at a spherical hole in an infinite elastoplastic medium. **87** (1980) 339–356
- HYLAND, J. M. E., JOHNSTONE, P. T. & PITTS, A. M. Tripos theory. **88** (1980) 205–231
- ILORI, S. A. Normal bundles in flag bundles. **90** (1981) 395–402
- ISLAM, J. N. On the static field in general relativity. **81** (1977) 485–496
On the static field in general relativity. II. **83** (1978) 299–306
- ISMAIL, M. E. H. & MAY, C. P. Special functions, infinite divisibility and transcendental equations. **85** (1979) 453–464
- ITO, R. Rotation sets are closed. **89** (1981) 107–111
- ITO, T. & BIGGS, N. L. Graphs with even girth and small excess. **88** (1980) 1–10
- JAMES, G. D. On a conjecture of Carter concerning irreducible Specht modules. **83** (1978) 11–17
Some combinatorial results involving Young diagrams. **83** (1978) 1–10
- JAMES, I. M. On fibre spaces and nilpotency. **84** (1978) 57–60
On fibre spaces and nilpotency. II. **86** (1979) 215–217
- JARRATT, J. D. The decomposition of crystal families. **88** (1980) 245–263
- JOHNS, D. L. & GIBSON, C. G. A constructive approach to the duality theorem for certain Orlicz spaces. **89** (1981) 49–69
- JOHNSON, K. W. S -rings over loops, right mapping groups and transversals in permutation groups. **89** (1981) 433–443
- JOHNSTONE, P. T. & LINTON, F. E. J. Finiteness and decidability: II. **84** (1978) 207–219
- JOHNSTONE, P. T., PITTS, A. M. & HYLAND, J. M. E. Tripos theory. **88** (1980) 205–231
- KAHN, D. S. & PRIDDY, S. B. On the transfer in the homology of symmetric groups. **83** (1978) 91–101
The transfer and stable homotopy theory. **83** (1978) 103–111
- KAJUSER, S. On Banach modules. I. **90** (1981) 423–444
- KALLENBERG, O. A counter example to R. Davidson's conjecture on line processes. **82** (1977) 301–307
- KALTON, N. J. Orlicz sequence spaces without local convexity. **81** (1977) 253–277
- KANE, R. Rational BP operations and the Chern character. **84** (1978) 65–72
The cohomology of finite H-spaces as $U(M)$ algebras. I. **89** (1981) 473–490
The cohomology of finite H-spaces as $U(M)$ algebras. II. **90** (1981) 113–125
- KANTER, M. Equivalence singularity dichotomies for a class of ergodic measures. **81** (1977) 249–252
- KASSEM, S. E. & GORGUI, M. A. On the generation of short internal waves by cylinders oscillating at the surface separating two infinite liquids. **83** (1978) 481–494
- KATSUNO, K. Null hypersurfaces in Lorentzian manifolds. I. **88** (1980) 175–182
Null hypersurfaces in Lorentzian manifolds. II. **89** (1981) 525–532
- KEADY, G. & NORBURY, J. On the existence theory for irrotational water waves. **83** (1978) 137–157
- KEARTON, C., BAYER, E. & HILLMAN, J. A. The factorization of simple knots. **90** (1981) 495–506
- KENKU, M. A. The modular curve $X_0(39)$ and rational isogeny. **85** (1979) 21–23
The modular curves $X_0(65)$ and $X_0(91)$ and rational isogeny. **87** (1980) 15–20
- KENT, J. Limiting behaviour of the von Mises-Fisher distribution. **84** (1978) 531–536
- KENT, J. T. Convolution mixtures of infinitely divisible distributions. **90** (1981) 141–153
- KING, A. R. Black-hole magnetostatics. **81** (1977) 149–156
- KINGMAN, J. F. C. The asymptotic covariance of two counters. **82** (1977) 447–452
The properties of bilinear models for the balance between genetic mutation and selection. **81** (1977) 441–453
- KIRBY, D. Subrings of the first neighbourhood ring. **86** (1979) 205–214
- KIRBY, D. & ADRANGHI, M. R. A Lattice of extension rings for a commutative ring. **84** (1978) 225–235
- KIRBY, R. C. & LICKORISH, W. B. R. Prime knots and concordance. **86** (1979) 437–441
- KLEEMAN, J. & GILLIS, J. A combinatorial proof of a positivity result. **86** (1979) 13–19
- KNOPOFF, L., HUDSON, J. A., CHATTERJEE, A. K. & MAL, A. K. Attenuation of elastic waves in a cracked, fluid-saturated solid. **88** (1980) 547–561
- KNOPS, R. J. & PAYNE, L. E. On potential wells and stability in nonlinear elasticity. **84** (1978) 177–190
- KÖLLERSTRÖM, J. Stochastic bounds for the queue GI/G1 in heavy traffic. **84** (1978) 361–375

- KONG, J. A. & CHEW, W. C. Asymptotic formula for the capacitance of two oppositely charged discs. **89** (1981) 373–384
- KUTTNER, B. A counter-example in summability theory. **83** (1978) 353–355
- KUTTNER, B. & SAHNEY, B. On non-uniqueness of the order of saturation. **84** (1978) 113–116
- KYLE, J. Spectra of derivations. **82** (1977) 49–57
- LACHER, R. C. & BRYANT, J. L. Resolving acyclic images of three-manifolds. **88** (1980) 311–319
Resolving zero-dimensional singularities in generalized manifolds. **83** (1978) 403–413
- LAFFEY, T. J. The Hughes problem for exponent nine. **87** (1980) 393–399
- LAFUENTE, J. Homomorphisms and formations of given derived class. **84** (1978) 437–441
- LAM, K. Y. Nonsingular bilinear maps and stable homotopy classes of spheres. **82** (1977) 419–425
- LANCE, E. C. Martingale convergence in von Neumann algebras. **84** (1978) 47–56.
- LARMAN, D. G. & DALLA, L. Convex bodies with almost all k -dimensional sections polytopes. **88** (1980) 395–401
- LAVOINE, J. & MISRA, O. P. Abelian theorems for the distributional Stieltjes transformation. **86** (1979) 287–293
- LESTER, J. & McKIERNAN, M. A. On null cone preserving mappings. **81** (1977) 455–462
- LICKORISH, W. B. R. & KIRBY, R. C. Prime knots and concordance. **86** (1979) 437–441
- LIGHT, W. A. & CHENEY, E. W. Some best-approximation theorems in tensor-product spaces. **89** (1981) 385–390
- LIN, W.-H. On conjectures of Mahowald, Segal and Sullivan. **87** (1980) 449–458
The Adams-Mahowald conjecture on real projective spaces. **86** (1979) 237–241
- LIN, W.-H., DAVIS, D. M., MAHOWALD, M. E. & ADAMS, J. F. Calculation of Lin's Ext groups. **87** (1980) 549–469
- LINNELL, P. A. Zero divisors and idempotents in group rings. **81** (1977) 351–364
- LINTON, F. E. J. & JOHNSTONE, P. T. Finiteness and decidability. II. **84** (1978) 207–219
- LLOYD, J. W. & HUNTER, R. J. Eberlein compacts and spaces of continuous functions. **85** (1979) 305–513
Weakly compactly generated locally convex spaces. **82** (1977) 85–98
- LOIZOU, G. & FARMER, M. R. An algorithm for the total, or partial, factorisation of a polynomial. **82** (1977) 427–437
- LORIMER, P. On projective planes of type $(6, m)$. **88** (1980) 199–204
- LOSEY, G. O. & LOSEY, N. Augmentation quotients of some nonabelian finite groups. **85** (1979) 261–270
- LOSEY, N. & LOSEY, G. O. Augmentation quotients of some nonabelian finite groups. **85** (1979) 261–270
- LOTWICK, H. W. & SILVERMAN, B. W. Convergence of spatial birth and death processes. **90** (1981) 155–165
- LOWE, P. G. A note on surface geometry with special reference to twist. **87** (1980) 481–487
- LOWE, P. G. & YASSERI, S. F. Non-linear optimized fibre reinforced plates in bending. **84** (1978) 539–543
- LOXTON, J. H. & Van der POORTEN, A. J. On the growth of recurrence sequences. **81** (1977) 369–376
- LOYNES, R. M. On the weak convergence of U -statistic processes, and of the empirical process. **83** (1978) 269–272
- LUNDBORG, B. Phase-integral treatment of transmission through an inverted Morse potential. **81** (1977) 463–483
Phase-integral treatment of wave reflexion by real potentials. **85** (1979) 493–522
- LUSZTIG, G. & BEYNON, W. M. Some numerical results on the characters of exceptional Weyl groups. **84** (1978) 417–426
- LUTHER, W. The remainder in a gap Tauberian theorem for Abel summability. **81** (1977) 43–45
- MACLEAN, A. Modifications of Fourier transforms and singular continuous measures. **87** (1980) 383–392
- MADDOX, I. J. A new type of convergence. **83** (1978) 61–64
Consistency and Nörlund means. **82** (1977) 107–109
Generalized Nörlund means and consistency theorems. **87** (1980) 243–248
On strong almost convergence. **85** (1979) 345–350
The variances of a sequence. **84** (1978) 109–112
- MADSEN, I., SNAITH, V. & TORNEHAVE, J. Infinite loop maps in geometric topology. **81** (1977) 299–430
- MAEJIMA, M. & BASU, S. K. A local limit theorem for attractions under a stable law. **87** (1980) 179–187

- MAGNUS, R. On universal unfoldings of certain real functions on a Banach space. **81** (1977) 91–95
 Universal unfoldings in Banach spaces: reduction and stability. **86** (1979) 41–55
- MAGNUS, R. J. Determinancy in a class of germs on a reflective Banach space. **84** (1978) 293–303
 Stability of universal unfoldings: a correction. **90** (1981) 195–196
- MAHOWALD, M. E., ADAMS, J. F., LIN, W.-H. & DAVIS, D. M. Calculation of Lin's Ext groups. **87** (1980) 459–469
- MAL, A. K., KNOPOFF, L., HUDSON, J. A. & CHATTERJEE, A. K. Attenuation of elastic waves in a cracked, fluid-saturated solid. **88** (1980) 547–561
- MARKOWITZ, M. J. An intrinsic conformal Lorentz pseudodistance. **89** (1981) 359–371
- MARTENS, E. Perturbations by operators converging compactly to zero. **81** (1977) 387–393
- MARTINEZ MORENO, J. JV-Algebras. **87** (1980) 47–50
- MASON, D. R. On coverings on a finite group by abelian subgroups. **83** (1978) 205–209
- MASON, J. H. & OXLEY, J. G. A circuit covering result for matroids. **87** (1980) 25–27
- MATHER, M. The number of non-homogeneous lattice points in plane subsets. **83** (1978) 25–29
- MATHER, M. & BARNES, E. S. The number of non-homogeneous lattice points in subsets of R^n . **82** (1977) 265–268
- MATHIAS, A. R. D., OSTASZEWSKI, A. J. & TALAGRAND, M. On the existence of an analytic set meeting each compact set in a Borel set. **84** (1978) 5–10.
- MATUMOTO, T. & SIEBENMANN, L. The topological S -cobordism theorem fails in dimension 4 or 5. **84** (1978) 85–87
- MAXWELL, G. On the crystallography of infinite Coxeter groups. **82** (1977) 13–24
- MAY, C. P. & ISMAIL, M. E. H. Special functions, infinite divisibility and transcendental equations. **85** (1979) 453–464
- MAY, J. P. The spectra associated to \mathcal{S} -monoids. **84** (1978) 313–323
- MAY, J. P., COHEN, F. R. & TAYLOR, L. R. Splitting of certain spaces CX. **84** (1978) 465–496
- MAY, J. P., TAYLOR, L. R. & COHEN, F. R. Splitting of some more spaces. **86** (1979) 227–236
- MCCRUDDEN, M. On n th roots and infinitely divisible elements in a connected Lie group. **89** (1981) 293–299
 On the n th-root set of an element in a connected semisimple Lie group. **86** (1979) 219–225
- McKIERNAN, M. A. & LESTER, J. A. On null cone preserving mappings. **81** (1977) 455–462
- McSHERRY, D. M. G. Fully admissible binary relations in topology. **82** (1977) 259–264
- MECKE, J. Random measures on measurable spaces. **85** (1979) 111–115
- MEIR, A. & MOON, J. W. Path node-covering constants for certain families of trees. **84** (1978) 519–529
- MELROSE, R. B. & FRIEDLANDER, F. G. The wave front set of the solution of a simple initial-boundary value problem with glancing rays. II. **81** (1977) 97–120
- MELZAK, Z. A. Multi-indexing and multiple clustering. **86** (1979) 313–337
- MILLER, H. R. A localization theorem in homological algebra. **84** (1978) 73–84
- MILNER, E. C., RADO, R. & ERDÖS, P. Corrigenda. Families of sets whose pairwise intersections have prescribed cardinals or order types. **81** (1977) 522
- MILNES, P. Continuity properties of compact right topological groups. **86** (1979) 427–435
- MILNES, P. & BAKER, J. W. The ideal structure of the Sone-Čech compactification of a group. **82** (1977) 401–409
- MINC, H. An upper bound for the multidimensional dimer problem. **83** (1978) 461–462
- MISHRA, B. P. & SRIVASTAVA, A. P. Strong and absolute summabilities of functions based on (D, α) summability methods. **86** (1979) 279–286
- MISHRA, S. K. & DAS, G. A note on a theorem of Maddox on strong almost convergence. **89** (1981) 393–396
- MISRA, O. P. & LAVOINE, J. Abelian theorems for the distributional Stieltjes transformation. **86** (1979) 287–293
- MISLIN, G. The geometric realization of Wall obstructions by nilpotent and simple spaces. **87** (1980) 199–206
- MITCHELL, W. J. R. Dual modules. **84** (1978) 21–24
 Local homology and cohomology. **89** (1981) 309–324
- MOFFAT, J. On groups of automorphisms of operator algebras. **81** (1977) 237–243
- MONTESINOS, J. M. A note on 3-fold branched coverings of S^3 . **88** (1980) 321–325
- MOON, J. W. & MEIR, A. Path node-coverings constants for certain families of trees. **84** (1978) 519–529
- MORAN, P. A. P. Global stability of genetic systems governed by mutation and selection. II. **81** (1977) 435–441

- MORAN, W. & WILLIAMSON, J. H. Isotone measures on groups. 84 (1978) 89–107
- MORTON, H. R. Closed braids which are not prime knots. 86 (1979) 421–426
Some unexpectedly non-singular orbit spaces. 82 (1977) 35–37
- MUKHERJEA, A. & CHAUDHURI, R. Convergence of non-homogeneous stochastic chains II. 90 (1981) 167–182
- MULVEY, C. J. A non-commutative Gel'fand-Naimark theorem. 88 (1980) 425–428
- MUSSON, I. M. Injective modules for group algebras of locally finite groups. 84 (1978) 247–263
- NAGHDI, P. M. & GREEN, A. E. On non-local continuum mechanics. 83 (1978) 307–319
- NEISENDORFER, J. A. 3-primary exponents. 90 (1981) 63–83
- NEWSTEAD, P. E. Comparison theorems for conic bundles. 90 (1981) 21–31
Invariants of pencils of binary cubics. 89 (1981) 201–209
- NI, W.-T. Conditions for an affine manifold with torsion to have a Riemann-Cartan structure. 90 (1981) 517–527
- NI, W.-T. & CHENG, K.-S. Conditions for the local existence of metric in a generic affine manifold. 87 (1980) 527–534
- NICHOLLS, P. & ZARROW, R. Convex fundamental regions for Fuchsian groups. 84 (1978) 507–518
Convex fundamental regions for Fuchsian groups. II. 86 (1979) 295–300
- NIEDERREITER, H. & ROBINSON, K. Bol loops of order pq . 89 (1981) 241–256
- NORBURY, J. & BUDDEN, P. J. Sluice-gate problems with gravity. 81 (1977) 157–175
- NORBURY, J. & KEADY, G. On the existence theory for irrotational water waves. 83 (1978) 137–157
- OGDEN, R. W. Inequalities associated with the inversion of elastic stress-deformation relations and their implications. 81 (1977) 313–324
On plane deformations of incompressible isotropic elastic solids. 83 (1978) 127–136
- OGDEN, R. W. & HAUGHTON, D. M. Bifurcation of rotating circular cylindrical elastic membranes. 87 (1980) 357–376
- OLVER, P. J. Euler operators and conservation laws of the BBM equation. 85 (1979) 143–160
On the Hamiltonian structure of evolution equations. 88 (1980) 71–88
- OSTASZEWSKI, A. J., MATHIAS, A. R. D. & TALAGRAND, M. On the existence of an analytic set meeting each compact set in a Borel set. 84 (1978) 5–10
- OSTLING, E. G. & BELLENOT, S. F. Completeness and intertwined completeness of locally convex spaces. 81 (1977) 25–30
- OXLEY, J. G. Cocircuit coverings and packings for binary matroids. 83 (1978) 347–351
On a matroid generalization of graph connectivity. 90 (1981) 207–214
- OXLEY, J. G. & MASON, J. H. A circuit covering result for matroids. 87 (1980) 25–27
- PALMER, E. M. & HARARY, F. The probability that a point of a tree is fixed. 85 (1979) 407–415
- PARRY, G. P. A continuum model of many-body interactions in a perfect crystal. 85 (1979) 379–385
On the comparison of stability criteria in anisotropic materials. 86 (1979) 529–538
On the crystallographic point groups and on Cauchy symmetry. 82 (1977) 165–175
- PARSON, L. A. Dedekind sums and Hecke operators. 88 (1980) 11–14
- PARTINGTON, J. R. Constants relating a hermitian operator and its square. 85 (1979) 325–333
Hadamard-Landau inequalities in uniformly convex spaces. 90 (1981) 259–264
On the Banach - Saks property. 82 (1977) 369–374
- PASSI, I. B. S. & VERMANI, L. R. The associated graded ring of an integral group ring. 82 (1977) 25–33
- PATHAK, R. S. Analytic functions having distributional boundary values in W' -spaces. 87 (1980) 227–242
- PATTERSON, S. J. A footnote to 'On the coefficients of certain automorphic forms'. 84 (1978) 337–343
Spectral theory and Fuchsian groups. 81 (1977) 58–75
- PATTERSON, S. J., POMMERENKE, CH. & HAYMAN, W. K. On the coefficients of certain automorphic functions. 82 (1977) 357–367
- PAYNE, L. E. & KNOPS, R. J. On potential wells and stability in nonlinear elasticity. 84 (1978) 177–190
- PAYNE, M. T. J. & CARTER, R. W. On homomorphisms between Weyl modules and Specht modules. 87 (1980) 419–425

- PENROSE, R. & SMITH, C. A. B. A quadratic mapping with invariant cubic curve. **89** (1981) 89–105
- PESTANA, D., SREEHARI, M. & SHANBHAG, D. N. Some further results in infinite divisibility. **82** (1977) 289–295
- PETERSON, F. P., BROWN, E. H. JR. & DAVIS, D. M. The homology of BO and some results about the Steenrod algebra. **81** (1977) 393–398
- PHILLIPS, R. E., PLOTKIN, J. M. & HICKIN, K. K. Periodic groups generated by finite amalgams. **87** (1980) 189–197
- PIGNO, L. Transforms which almost vanish at infinity. **87** (1980) 75–79
- PITTS, A. M., HYLAND, J. M. E. & JOHNSTONE, P. T. Tripos theory. **88** (1980) 205–231
- PLOTKIN, J. M., HICKIN, K. K. & PHILLIPS, R. E. Periodic groups generated by finite amalgams. **87** (1980) 189–197
- POMMERENKE, Ch., HAYMAN, W. K. & PATTERSON, S. J. On the coefficients of certain automorphic functions. **82** (1977) 357–367
- PORTER, D. & SEWELL, M. J. Constitutive surfaces in fluid mechanics. **88** (1980) 517–546
- POWER, S. C. The distance to upper triangular operators. **88** (1980) 327–329
- PRAMANIK, A. K. Waves created against a vertical cliff – a uniform asymptotic solution. **83** (1978) 321–328
- PRIDY, S. B. & KAHN, D. S. On the transfer in the homology of symmetric groups. **88** (1978) 91–101
The transfer and stable homotopy theory. **83** (1978) 103–111
- PRIDE, S. J. One-relator quotients of free products. **88** (1980) 233–243
- PRIDE, S. J. & BAUMSLAG, B. An extension of the Freiheitssatz. **89** (1981) 35–41
- PRINJA, A. K. On the Green's function for heterogeneous media in one-speed transport theory. **89** (1981) 181–192
- PYM, J. S. Footnote to a paper of Baker and Milnes. **85** (1979) 315
- RADO, R., ERDÖS, P. & MILNER, E. C. Corrigenda. Families of sets whose pairwise intersections have prescribed cardinals or order types. **81** (1977) 522
- RAKA, M. The inhomogeneous minimum of quadratic forms of signature ± 1 . **89** (1981) 225–235
- RAND, D. The topological classification of Lorenz attractors. **83** (1978) 451–460
- RANKIN, R. A. Subgroups of the unimodular group defined by a congruence. **86** (1979) 451–459
- RAVENEL, D. C. The nonexistence of odd primary Arf invariant elements in stable homotopy. **83** (1978) 429–443
- REES, D. Rings associated with ideals and analytic spread. **89** (1981) 423–432
- RENNIE, B. C. The Riemann integrability of $f'^2 + g'^2, f', g'$. **82** (1977) 275–276
- RHODES, F. Kneading of Lorenz type for intervals and product spaces. **89** (1981) 167–179
- RHODES-ROBINSON, P. F. On waves at an interface between two liquids. **88** (1980) 183–191
- RITTER, G. On dichotomy of Riesz products. **85** (1979) 79–89
- ROBBIANO, L. & VALLA, G. On the equations defining tangent cones. **88** (1980) 281–297
- ROBBINS, K. A. A new approach to subcritical instability and turbulent transitions in a simple dynamo. **82** (1977) 309–325
- ROBERTSON, A. G. Best approximation in von Neumann algebras. **81** (1977) 233–236
Stable range in C^* -algebras. **87** (1980) 413–418
- ROBINSON, G. C. & WELSH, D. J. A. The computational complexity of matroid properties. **87** (1980) 29–45
- ROBINSON, K. & NIEDERREITER, H. Bol loops of order pq . **89** (1981) 241–256
- ROCHBERG, R. & BAERNSTEIN, A. II. Means and coefficients of functions which omit a sequence of values. **81** (1977) 47–57
- ROCKLIFF, N. Finite amplitude effects in free and forced edge waves. **83** (1978) 463–479
- ROE, J. A characterization of the sine function. **87** (1980) 69–73
- ROGERS, L. C. G. A simple proof of Müntz's theorem. **90** (1981) 1–3
- ROITBERG, J., SINGER, D. & HILTON, P. On G -spaces, Serre classes and G -nilpotency. **84** (1978) 443–453
- RONSE, C. On centralizers of involutions in 2-groups. **86** (1979) 199–204
- ROSENBLATT, J. M. Strongly equivalent invariant measures. **88** (1980) 33–43.
- ROUSSEAU, R. The covariance algebra of an extended covariant system. **85** (1979) 271–280
The left Hilbert algebra associated to a semi-direct product. **82** (1977) 411–418
- RUDIN, W. Inner function images of radii. **85** (1979) 357–360
- RUESS, W. Closed graph theorems for generalized inductive limit topologies. **82** (1977) 67–83

- RUTTER, J. W. The group of self-homotopy equivalences of three sphere bundles over the seven sphere. **84** (1978) 303–313
- RYCHLIK, Z. & CSÖRGÖ, M. Weak convergence of sequences of random elements with random indices. **88** (1980) 171–174
- SAHNEY, B. & KUTTNER, B. On non-uniqueness of the order of saturation. **84** (1978) 113–116
- SAITO, K.-S. Noncommutative L^p -spaces with $0 < p < 1$. **89** (1981) 405–411
- SANDLING, R. & TAHARA, K. I. Augmentation quotients of group rings and symmetric powers. **85** (1979) 247–252
- SAYER, F. P. The eigenvalue problem for infinite systems of linear equations. **82** (1977) 269–273
- SCHAEFFER, D. G. Qualitative analysis of a model for boundary effects in the Taylor problem. **87** (1980) 307–337
- SCHAFIR, R. L. The Variational Principle and natural transformations I. Autonomous dynamical systems. **90** (1981) 537–560
- SCHECHTER, M. The continuous singular spectrum of the Schrödinger operator. **88** (1980) 59–69
- SCHEINGORN, M. Transitivity for the modular group. **88** (1980) 409–423
- SCHOLL, A. J. On the algebra of modular forms on a congruence subgroup. **86** (1979) 461–466
- SEGAL, D. Irreducible representations of finitely generated nilpotent groups. **81** (1977) 201–208
- SEGAL, D. & GRUNEWALD, F. J. How to solve a quadratic equation in integers **89** (1981) 1–5
- SEGAL, D. & GRUNEWALD, F. On polycyclic groups with isomorphic finite quotients. **84** (1978) 235–247
- SEGAL, G. B. & STRETCH, C. T. Characteristic classes for permutation representations. **90** (1981) 265–272
- SEWELL, M. J. On Legendre transformations and elementary catastrophes. **82** (1977) 147–163
On Legendre transformations and umbilic catastrophes. **83** (1978) 273–288
- SEWELL, M. J. & PORTER, D. Constitutive surfaces in fluid mechanics. **88** (1980) 517–546
- SHAKI, A. S. Algebraic solutions of partizan games with cycles. **85** (1979) 227–246
- SHAKIBAN, C. A resolution of the Euler operator. II. **89** (1981) 501–510
- SHANBHAG, D. N. & BIGGINS, J. D. Some divisibility problems in branching processes. **90** (1981) 321–330
- SHANBHAG, D. N., PESTANA, D. & SREEHARI, M. Some further results in infinite divisibility. **82** (1977) 289–295
- SHARP, R. X. A commutative Noetherian ring which possesses a dualizing complex is acceptable. **82** (1977) 197–213
Cohen-Macaulay properties for balanced Cohen-Macaulay modules. **90** (1981) 229–238
- SHARP, R. Y. & BIJAN-ZADEH, M. H. On Grothendieck's local duality theorem. **85** (1979) 431–437
- SHARP, R. Y. & HALL, J. E. Dualizing complexes and flat homomorphisms of commutative Noetherian rings. **84** (1978) 37–45
- SHEARER, M. One-parameter perturbations of bifurcation from a simple eigenvalue. **88** (1980) 111–123
On the null-spaces of linear Fredholm operators depending on several parameters **84** (1978) 131–142
- SHELAH, S., GLASS, A. M. W., GUREVICH, Y. & HOLLAND, W. C. Rigid homogeneous chains. **89** (1981) 7–17
- SHEPHARD, G. C. & GRÜNBAUM, B. The eighty-one types of isohedral tilings in the plane. **82** (1977) 177–196
- SHERWOOD, J. D. Spindle-shaped drops in a viscous extensional flow. **90** (1981) 529–536
- SIBSON, R. A vector identity for the Dirichlet tessellation. **87** (1980) 151–155
- SIEBENMANN, L. & MATUMOTO, T. The topological S -cobordism theorem fails in dimension 4 or 5. **84** (1978) 85–87
- SILVERMAN, B. W. & LOTWICK, H. W. Convergence of spatial birth and death processes. **90** (1981) 155–165
- SINGER, B. & FRYDMAN, H. Total positivity and the embedding problem for Markov chains. **86** (1979) 339–344
- SINGER, D., HILTON, P. & ROITBERG, J. On G -spaces, Serre classes and G -nilpotency. **84** (1978) 443–453
- SINGER, W. M. A new chain complex for the homology of the Steenrod algebra. **90** (1981) 279–292
- SINGMASTER, D. & SOUPPOURIS, D. J. A constrained isoperimetric problem. **83** (1978) 73–82

- SLEEMAN, B. D. & BROWNE, P. J. Applications of multiparameter spectral theory to special functions. 87 (1980) 275–283
- SMITH, C. A. B. & PENROSE, R. A quadratic mapping with invariant cubic curve. 89 (1981) 89–105
- SMITH, J. D. H. A second grammar of associators. 84 (1978) 405–415
On the nilpotence class of commutative Moufang loops 84 (1978) 387–404
- SMITH, J. Q. Mixture catastrophes and Bayes decision theory. 86 (1979) 91–101
- SMITH, R. A. Existence of periodic orbits of autonomous retarded functional differential equations. 88 (1980) 89–109
On non-unital Jordan Banach algebras. 82 (1977) 375–380
- SMITH, R. R. On Banach algebra elements of thin numerical range. 86 (1979) 71–83
On non-unital Jordan Banach algebras. 82 (1977) 375–380
The numerical range in the second dual of a Banach algebra. 89 (1981) 301–307
- SNAITH, V. Localised stable homotopy of some classifying spaces. 89 (1981) 325–330
- SNAITH, V. P. The 2-primary J-homomorphism. 82 (1977) 381–387
- SNAITH, V., TORNEHAVE, J. & MADSEN, I. Infinite loop maps in geometric topology. 81 (1977) 399–430
- SOUPOURIS, D. J. & SINGMASTER, D. A constrained isoperimetric problem. 83 (1978) 73–82
- SREEHARI, M., SHANBHAG, D. N. & PESTANA, D. Some further results in infinite divisibility 82 (1977) 289–295
- SRIVASTAVA, A. P. & MISHRA, B. P. Strong and absolute summabilities of functions based on (D, α) summability methods. 86 (1979) 279–286
- STACEY, P. J. The structure of type I JBW-algebras. 90 (1981) 477–482
- STANTON, R. J. & WEINSTEIN, A. On the L^4 norm of spherical harmonics. 89 (1981) 343–358
- STEINER, R. A canonical operad pair. 86 (1979) 443–449
Infinite loop structures on the algebraic K-theory of spaces. 90 (1981) 85–111
- STEINER, R. J. Exact sequences of conjugacy classes and rationalization. 82 (1977) 249–253
- STERN, R. J. & GALEWSKI, D. E. Orientation-reversing involutions on homology 3-spheres. 85 (1979) 449–451
- STEWART, I. N. Bifurcation and hysteresis varieties for the thermal-chainbranching model with a negative modal parameter. 90 (1981) 127–139
Catastrophe theory and equations of state: conditions for a butterfly singularity. 88 (1980) 429–449
- STEWARTSON, K. & DANIELS, P. G. On the spatial oscillations of a horizontally heated rotating fluid. 81 (1977) 325–349
Overstable convection in a horizontally heated rotating fluid. 83 (1978) 329–345
- STRETCH, C. T. Stable cohomotopy and cobordism of abelian groups. 90 (1981) 273–278
- STRETCH, C. T. & SEGAL, G. B. Characteristic classes for permutation representations. 90 (1981) 265–272
- SUBRAMANIAN, R. & BHAGWAT, K. V. Inequalities between means of positive operators. 83 (1978) 393–401
- SUDBERY, A. A generalised Poisson bracket and an associated natural one-form 81 (1977) 133–142
Quaternionic analysis. 85 (1979) 199–225
- SULLEY, L. J. & DODSON, C. T. J. On bundle completion of parallelizable manifolds. 87 (1980) 523–525
- SULLEY, L. J., WILLIAMS, P. M. & DODSON, C. T. J. An acceleration condition for b -incomplete timelike curves. 90 (1981) 191–193
- SWINNERTON-DYER, SIR PETER. The Hopf bifurcation theorem in three dimensions. 82 (1977) 469–483
- TAHARA, K. I. & SANDLING, R. Augmentation quotients of group rings and symmetric powers. 85 (1979) 247–252
- TAKÁCS, L. On an urn problem of Paul and Tatiana Ehrenfest. 86 (1979) 127–130
- TALAGRAND, M., OSTASZEWSKI, A. J. & MATHIAS, A. R. D. On the existence of an analytic set meeting each compact set in a Borel set. 84 (1978) 5–10
- TAYLOR, L. R., COHEN, F. R. & MAY, J. P. Splitting of certain spaces CX . 84 (1978) 465–496
- TAYLOR, L. R., COHEN, F. R. & MAY, J. P. Splitting of some more spaces. 86 (1979) 227–236
- TENNISON, B. R. Intersection multiplicities and tangent cones. 85 (1979) 33–42
- TERRAS, R. Normal modes for Green's functions and the method of theta functions. 89 (1981) 331–341
- THOMASON, R. W. Homotopy colimits in the category of small categories. 85 (1979) 91–109

- THOMPSON, J. M. T. & GASPAR, Z. A buckling model for the set of umbilic catastrophes. 82 (1977) 497–507
- TODD, D. G. Multipliers of certain convolution algebras over locally compact semigroups. 87 (1980) 51–59
- TOLAND, J. F. Solitary wave solutions for a model of the two-way propagation of water-waves in a channel. 90 (1981) 343–360
- TONGE, A. M. Translation invariance, compact semigroups and injective coalgebras. 83 (1978) 225–236
- TONGE, A. M. & CARNE, T. K. The injective tensor product of \mathcal{L}_p -algebras. 83 (1978) 237–242
- TORNEHAVE, J., MADSEN, I. & SNAITH, V. Infinite loop maps in geometric topology. 81 (1977) 399–430
- TOWERS, D. A. Lattice isomorphisms of Lie algebras. 89 (1981) 285–292
- TRUNG, N. V. A characterization of two-dimensional unmixed local rings. 89 (1981) 237–239
- TSIRULNIKOV, B. Subspaces with property (b) in locally convex spaces of quasi-barrelled type. 88 (1980) 331–337
- TYRER, A. P. On finite groups containing no element of order six. 81 (1977) 209–224
- URSELL, F. Integrals with a large parameter: a double complex integral with four nearly coincident saddle-points. 87 (1980) 249–273
On the exterior problems of acoustics: II. 84 (1978) 545–548
- VALLA, G. Remarks on generalized analytic independence. 85 (1979) 281–289
- VALLA, G. & ROBBIANO, L. On the equations defining tangent cones. 88 (1980) 281–297
- VÁMOS, P. On the minimal prime ideals of a tensor product of two fields. 84 (1978) 25–35.
- Van der POORTEN, A. J. & LOXTON, J. H. On the growth of recurrence sequences. 81 (1977) 369–376
- VAN KAMPEN, N. G. & GROENVELD, J. A simple proof of an identity of Good. 81 (1977) 183–184
- VERMANI, L. R. & PASSI, I. B. S. The associated graded ring of an integral group ring. 82 (1977) 25–33
- WALL, C. T. C. Affine cubic functions. I. The complex plane. 85 (1979) 387–401
Affine cubic functions III. The real plane. 87 (1980) 1–14
Nets of conics. 81 (1977) 351–364
Note on the invariant of plane cubics. 85 (1979) 403–406
- WALPOLE, L. J. A coated inclusion in an elastic medium. 83 (1978) 495–506
The determination of the elastic field of an ellipsoidal inclusion in an anisotropic medium. 81 (1977) 283–289
- WARD, A. J. Solutions of two problems of Arhangel'skii and Wiegandt. 84 (1978) 61–64
- WASSERMAN, A. S. Injective W^* -algebras. 82 (1977) 39–47
- WEBB, J. R. L. & EDMUNDS, D. E. Some generalisations of the Borsuk-Ulam theorem. 82 (1977) 119–125
- WEBB, P. J. The projective extensions of a finite group. 90 (1981) 251–257
- WEBB, U. H. M. An independence theorem for automorphisms of torsion-free groups. 90 (1981) 403–409
- WEBER, N. C. & EAGLESON, G. K. Limit theorems for weakly exchangeable arrays. 84 (1978) 123–130
- WEHRFRITZ, B. A. F. Groups whose irreducible representations have finite degree. 90 (1981) 411–421
- WEINSTEIN, A. & STANTON, R. J. On the L^4 norm of spherical harmonics. 89 (1981) 343–358
- WEISS, R. An application of p -factorization methods to symmetric graphs. 85 (1979) 43–48
- WELSH, D. J. A. & ROBINSON, G. C. The computational complexity of matroid properties. 87 (1980) 29–45
- WICKHAM, G. R. The forced two dimensional oscillations of a rigid strip in smooth contact with a semi-infinite elastic solid. 81 (1977) 291–311
- WIELENBERG, N. The structure of certain subgroups of the Picard group. 84 (1978) 427–437
- WILDE, I. F. & DREISSLER, W. Stochastic independence in non-commutative probability theory. 86 (1979) 103–114
- WILLIAMS, J. K. & DOMAN, B. G. S. Fibonacci and Lucas polynomials. 90 (1981) 385–387
- WILLIAMS, M. M. R. Transport theory in anisotropic media. 84 (1978) 549–567
- WILLIAMS, N. H. Chain conditions and the existence of delta-families. 83 (1978) 167–179
- WILLIAMS, P. M., DODSON, C. T. J. & SULLEY, L. J. An acceleration condition for b -incomplete timelike curves. 90 (1981) 191–193

- WILLIAMSON, J. H. & MORAN, W. Isotone measures on groups. **84** (1979) 89–107
- WILSON, G. Commuting flows and conservation laws for Lax equations. **86** (1979) 131–143
Hamiltonian and algebro-geometric integrals of stationary equations of KdV type. **87** (1980) 295–305
- WILSON, J. R. Proof of the antithetic-variates theorem for unbounded functions. **86** (1979) 477–479
- WILSON, J. S. Groups with many characteristically simple subgroups. **86** (1979) 193–198
- WILSON, P. M. H. On blowing up conductor ideals. **83** (1978) 445–450
The arithmetic plurigenera of surfaces. **85** (1979) 25–31
- WOOD, J. C. An extension theorem for holomorphic mappings. **88** (1980) 125–127
A note on the fundamental group of a manifold of negative curvature. **83** (1978) 415–417
- WRIGHT, E. M. A quadratic recurrence of Faltung type. **88** (1980) 193–197
Large cycles in large labelled graphs. II. **81** (1977) 1–2
- YASSERI, S. F. & LOWE, P. G. Non-linear optimized fibre reinforced plates in bending. **84** (1978) 539–543
- YEADON, F. J. Ergodic theorems for semifinite von Neumann algebras. II. **88** (1980) 135–147
Isometries of non-commutative L^p -spaces. **90** (1981) 41–50
- YOUNG, N. J. Norm and spectral radius for algebraic elements of Banach algebra. **88** (1980) 129–133
- YOUNGSON, M. A. A Vidav theorem for Banach Jordan algebras. **84** (1978) 263–273
Equivalent norms on Banach Jordan algebras. **86** (1979) 261–269
- YU, K. A note on a problem of Baker in metrical number theory. **90** (1981) 215–227
- ZARROW, R. & NICHOLLS, P. Convex fundamental regions for Fuchsian groups. **84** (1978) 507–518
Convex fundamental regions for Fuchsian groups. II. **86** (1979) 295–300
- ZEEMAN, E. C. & HAYDEN, J. A Lagrangian Klein bottle. **89** (1981) 193–200
- ZUCKER, I. J. The evaluation in terms of Γ -functions of the periods of elliptic curves admitting complex multiplication. **82** (1977) 111–118

THE PREPARATION OF MANUSCRIPTS

The attention of authors is particularly directed to the following requests.

1. Papers should be typed, double-spaced, on one side of white paper (of which A4, 210 by 297 mm, is a suitable size). The pages must be numbered. Margins of 30 mm should be left at the side, top and bottom of each page. The copy sent must be clear.

A cover page should give the title, the author's name and institution, with the address at which mail is to be sent.

The title, while brief, must be informative (e.g. *A new proof of the prime-number theorem*, whereas *Some applications of a theorem of G. H. Hardy* would be useless).

The first paragraph or two should form a summary of the main theme of the paper, providing an abstract intelligible to mathematicians.

For a typescript to be accepted for publication, it must accord with the standard requirements of publishers, and be presented in a form in which the author's intentions regarding symbols etc. are clear to a printer (who is not a mathematician).

The following notes are intended to help the author in preparing the typescript. New authors may well enlist the help of senior colleagues, both as to the substance of their work and the details of setting it out correctly and attractively.

2. Notation

Notation should be chosen carefully so that mathematical operations are expressed with all possible neatness, to lighten the task of the compositor and reduce the chance of error.

For instance n_k (n sub k) is common usage, but avoid if possible using c sub n sub k . Fractions are generally best expressed by a solidus. Complicated exponentials like

$$\exp \{z^2 \sin \theta / (1 + y^2)\}$$

should be shown in this and no other way.

In the manuscript, italics, small capitals and capitals are specified by single, double and triple underlining. Bold-faced type is shown by wavy underlining: wavy will be printed **wavy**.

It helps if displayed equations or statements which will be quoted later are numbered in order on the right of their line. They can then be referred to by, for example, 'from (7)'.
The author must enable the printer (if necessary by pencilled notes in the margin) to distinguish between similar symbols such as o , O , o , O , 0 ; x , X , \times ; ϕ , Φ , \varnothing ; l , 1 ; ϵ , ϵ ; κ , k .

Greek letters can be denoted by Gk in the margin.

If an author wishes to mark the end of the proof of a theorem, the sign \square may be used.

Footnotes should be avoided.

3. Diagrams

It is extremely helpful if diagrams are drawn in Indian ink on white card, faintly blue or green-lined graph paper, or tracing cloth or paper. *Symbols, legends and captions should be given on a transparent overlay*. Each text figure must be numbered as Figure 1, Figure 2, ... and its intended position clearly indicated in the manuscript:

Figure 1 here

The author's name in pencil must be on all separate sheets of diagrams.

A figure is expensive to reproduce and should be included only when the subject matter demands it, or when it greatly clarifies the exposition.

The Society recognizes that some authors do not have the facilities for producing drawings of a sufficiently high standard to be reproduced directly and it is therefore willing to have such diagrams re-drawn, provided that they are clear.

4. Tables

Tables should be numbered (above the table) and set out on separate sheets. Indicate the position of each in the text as for figures:

Table 3 here

5. References

References should be collected at the end of the paper numbered in alphabetical order of the authors' names. A reference to a book should give the title, in italics, and then in Roman type the publisher's name and the place and year of publication:

(4) JEFFREYS, H. *The earth*, 5th edition. University Press, Cambridge, 1970.

A reference to a paper should give in italics the title of the periodical, the number of the volume and year, and the beginning and end pages of the paper. Titles should be abbreviated as in *Mathematical Reviews*:

(6) LITTLEWOOD, J. E. The 'pits effect' for functions in the unit circle. *J. Analyse Math.* 23 (1970), 237-268.

*Mathematical Proceedings of
the Cambridge Philosophical Society*

MPCPCO 91 (Pt 3) 345-515 (1982) 0305-0041 May 1982

CONTENTS

SCHENZEL, P. Cohomological annihilators	345
MOND, D. On the tangent developable of a space curve	351
COHN, P. M. & SCHOFIELD, A. H. On the law of nullity	357
APPS, A. B. Boolean powers of groups	375
WEHRFRITZ, B. A. F. Groups whose irreducible representations have finite degree: III	397
BROWN, C., KARANIKAS, C. & WILLIAMSON, J. H. The asymmetry of $M_0(G)$	407
BUSCHMAN, R. G. & SRIVASTAVA, H. M. Series identities and reducibility of Kampé de Fériet functions	435
SEALEY, H. C. J. Some conditions ensuring the vanishing of harmonic differential forms with applications to harmonic maps and Yang-Mills theory	441
KWEE, B. On the converse of absolute Abel summability	453
DAVIES, R. O. & TRICOT, C. A theorem about countable decomposability	457
JOHNSON, F. E. A. Locally symmetric homology spheres and an application of Matsu- shima's formula	459
GOMEZ-LARRAÑAGA, J. C. Totally knotted knots are prime	467
LIVINGSTON, C. More 3-manifolds with multiple knot-surgery and branched-cover descriptions	473
BROWN, G. & MORAN, W. Probability measures with trivial Stam groups	477
TU, G. Z. On polynomial symmetries of the sine-Gordon equation	485
REDDY, B. D. Surface instabilities on an equibiaxially stretched elastic half-space	491
HIGGINS, J. R. Some orthogonal and complete sets of Bessel functions associated with the vibrating plate	503

© The Cambridge Philosophical Society 1982

CAMBRIDGE UNIVERSITY PRESS

THE PITT BUILDING, TRUMPINGTON STREET, CB2 1RP
32 EAST 57TH STREET, NEW YORK, N.Y. 10022

Price £16.00 net (U.S.A. and Canada US \$44.00)

*Subscription price £42.00 per volume (£84.00 per annum) net post free
(US \$105.00 per volume (US \$210.00 per annum) in U.S.A. and Canada)*

Printed in Great Britain at the University Press, Cambridge