AUTHOR INDEX
1980
Volumes 2–3

Throughout this Index, bold numerals are used to denote the volume number; lightface numerals denote the pages.

RESEARCH-EXPOSITORY PAPERS

Bott, Raoul, *Marston Morse and his mathematical works*, **3**, 907
Dynkin, E. B., *Markov processes and random fields*, **3**, 975
Goss, David, *The algebraist's upper half-plane*, **2**, 391
Grünbaum, Branko and Shephard, G. C., *Tilings with congruent tiles*, **3**, 951
Haris, S. J., *Number theoretical developments arising from the Siegel formula*, **2**, 417
Howe, Roger, *On the role of the Heisenberg group in harmonic analysis*, **3**, 821
Lax, Peter D. and Phillips, Ralph S., *Scattering theory for automorphic functions*, **2**, 261
Mackey, George W., *Harmonic analysis as the exploitation of symmetry—a historical survey*, **3**, 543
Mandelbaum, Richard, *Four-dimensional topology: An introduction*, **2**, 1
Marden, A., *Geometric relations between homeomorphic Riemann surfaces*, **3**, 1001
Phillips, Ralph S. *See* Lax, Peter D.
Sattinger, D. H., *Bifurcation and symmetry breaking in applied mathematics*, **3**, 779
Shephard, G. C. *See* Grünbaum, Branko

RESEARCH ANNOUNCEMENTS

Akbulut, Selman and King, Henry C., *A topological characterization of real algebraic varieties*, **2**, 171
Akbulut, Selman and Taylor, Larry, *A topological resolution theorem*, **2**, 174
Atzmon, Aharon, *On the union of sets of synthesis and Ditkin's condition in regular Banach algebras*, **2**, 317
Bautista, R., *On irreducible maps*, **2**, 177
Berger, M. S. and Fraenkel, L. E., *On nonlinear desingularization*, **2**, 165
Billera, Louis J. and Lee, Carl W., *Sufficiency of McMullen's conditions for f-vectors of simplicial polytopes*, **2**, 181
Borel, A., *Stable and L^2-cohomology of arithmetic groups*, **3**, 1025
Boyles, Stephanie M., *An example of a fixed point free homeomorphism of the plane with bounded orbits*, **3**, 1028
Bushnell, Colin J. and Reiner, Irving, *Solomon's conjectures and the local functional equation for zeta functions of orders*, **2**, 306
Chakiris, Kenneth N., *Counterexamples to global Torelli for certain simply connected surfaces*, **2**, 297
Chess, Daniel, *A Poincaré-Hopf type theorem for the de Rham invariant*, **3**, 1031
Collet, P. and Eckmann, J.-P., *On the abundance of aperiodic behaviour for maps on the unit interval*, **3**, 699
Dai, Z. D., Lam, T. Y. and Peng, C. K., *Levels in algebra and topology*, **3**, 845
Dani, S. G., *Dynamics of horospherical flows*, **3**, 1037
DeTurck, Dennis M., *The equation of prescribed Ricci curvature*, **3**, 701
Donkin, Stephen, *Blocks of rational representations of a semisimple algebraic group*, **3**, 867
Dowbor, Piotr and Simson, Daniel, *A characterization of hereditary rings of finite representation type*, **2**, 300
Eckmann, J.-P. *See* Collet, P.
Ellis, Richard S. and Rosen, Jay S., *Asymptotic expansions of Gaussian integrals*, **3**, 705
Evens, Leonard and Friedlander, Eric M., *$K_r(\mathbf{Z}/p^2)$ and $K_r(\mathbf{Z}/p[\epsilon])$ for $p \geq 5$ and $r \leq 4$*, **2**, 440
Fliess, Michel, *Realizations of nonlinear systems and abstract transitive Lie algebras*, **2**, 444
Fong, Paul and Srinivasan, Bhama, *Blocks with cyclic defect groups in $GL(n, q)$*, **3**, 1041
Fraenkel, L. E. *See* Berger, M. S.
Fried, D., Goldman W. and Hirsch, M. W., *Affine manifolds and solvable groups*, **3**, 1045
Friedlander, Eric M. *See* Evens, Leonard
Gillet, Henri. *Riemann-Roch theorems for higher algebraic k-theory*, **3**, 849
Goldman, W. *See* Fried, D. and Hirsch, M. W.

Hirsch, M. W. *See* Fried, D. and Goldman, W.
Jerison, David S. and Kenig, Carlos E., *An identity with applications to harmonic measure*, 2, 447
Jones, James P., *Undecidable diophantine equations*, 3, 859
Kac, V. G., *On simplicity of certain infinite dimensional Lie algebras*, 2, 311
Kac, V. G. and Peterson, D. H., *Affine Lie algebras and Hecke modular forms*, 3, 1057
Kahn, Jeff and Kung, Joseph P. S., *Varieties and universal models in the theory of combinatorial geometries*, 3, 857
Kenig, Carlos E. *See* Jerison, David S.
Kerckhoff, Steven P., *The Nielsen realization problem*, 2, 452
King, Henry C. *See* Akbulut, Selman
Kozlowski, George and Walsh, John J., *The cell-like mapping problem*, 2, 315
Kulkarni, R. S., *On Hurwitz' "84(g − 1) theorem" and pseudofree actions*, 2, 303
Kung, Joseph P. S. *See* Kahn, Jeff
Kutzko, Philip, *The Langlands conjecture for GL_2 of a local field*, 2, 455
Lacomba, Ernesto A. and Losco, Lucette, *Triple collisions in the isosceles 3-body problem*, 3, 710
Lam, T. Y. *See* Dai, Z. D. and Peng, C. K.
Lee, Carl W. *See* Billera, Louis J.
Libgober, Anatoly S. and Wood, John W., *Diffeomorphic complete intersections with different multidegrees*, 2, 459
Lomonaco, S. J., Jr., *Homology of group systems with applications to low-dimensional topology*, 3, 1049
Losco, Lucette. *See* Lacomba, Ernesto A.
Noakes, J. L., *Spherical fibrations*, 3, 853
Oliver, Robert, *SK_1 of p-adic group rings*, 3, 863
Ornstein, Donald S. and Weiss, Benjamin, *Ergodic theory of amenable group actions.* I: *The Rohlin lemma*, 2, 161
Peng, C. K. *See* Dai, Z. D. and Lam, T. Y.
Perry, P., Sigal, I. M., and Simon, B., *Absence of singular continuous spectrum in N-body quantum systems*, 3, 1019
Peterson, D. H. *See* Kac, V. G.
Reiner, Irving. *See* Bushnell, Colin J.
Rosen, Jay S. *See* Ellis, Richard S.
Schochet, Claude, *Homogeneous extensions of C*-algebras and K-theory.* I, 3, 715
Shahidi, Freydoon, *On nonvanishing of L-functions*, 2, 462
Sigal, I. M. *See* Perry, P. and Simon, B.
Simon, B. *See* Perry, P. and Sigal, I. M.
Simson, Daniel. *See* Dowbor, Piotr
Srinivasan, Bhama. *See* Fong, Paul
Stromberg, Jan-Olov and Torchinsky, Alberto, *Weights, sharp maximal functions and Hardy spaces*, 3, 1053
Sturm, Jacob, *Projections of C^∞ automorphic forms*, 2, 435
Taylor, Larry. *See* Akbulut, Selman
Torchinsky, Alberto. *See* Stromberg, Jan-Olov
Vargas, Jorge, *A character formula for the discrete series of a semisimple Lie group*, 2, 465
Walsh, John J. *See* Kozlowski, George
Weiss, Benjamin. *See* Ornstein, Donald S.
Wood, John W. *See* Libgober, Anatoly S.
Zimmer, Robert J., *An analogue of the Mostow-Margulis rigidity theorems for ergodic actions of semisimple Lie groups*, 2, 168

BOOK REVIEWS

Abraham, Ralph. *See* Sternberg, Shlomo
Adams, J. F., *Elements of homotopy theory* by George W. Whitehead, 2, 237
Andrews, George E. *See* Riordan, John
Ansorge, R. *See* Wasow, Wolfgang
Aris, R. *See* Maki, Daniel

Armendariz, Efraim P., *Von Neumann regular rings* by K. R. Goodearl, 3, 752
Arnold, V. I. *See* Braun, Martin
Arnold, V. I. *See* Sneddon, Ian N.
Baker, Alan, *Elliptic curves: Diophantine analysis* by Serge Lang, 2, 352
Barbu, V. *See* Berkovitz, Leonard D.
Basheleishvili, M. O. *See* Sneddon, I. N.
Baumgartner, J. E. *Basic set theory* by Azriel Levy, 3, 772
Beals, Richard, *Lectures on pseudo-differential operators: Regularity Theorems and applications to non-elliptic problems* by Alexander Nagel and E. M. Stein, 3, 1069
Berglund, J. F. *See* Day, Mahlon M.
Berkovitz, Leonard D., *Convexity and optimization in Banach spaces* by V. Barbu and Th. Precupanu, 2, 479
Besov, Oleg V. *See* Krantz, Steven G.
Billera, Louis J., *Introduction to mathematical economics* by Murray C. Kemp and Yoshio Kimura, 2, 355
Birkhoff, Garrett, *Computational analysis with* HP 25 *pocket calculator* by Peter Henrici; *Compact numerical methods for computers: linear algebra and function minimization* by J. C. Nash; *LINPACK Users' guide* by J. J. Dongarra, J. R. Bunch, C. B. Moler, and G. W. Stewart, 2, 503
Blass, Andreas, *Multiple-conclusion logic* by D. J. Shoesmith and T. J. Smiley, 2, 242
Blumenthal, R. M., *Brownian motion and classical potential theory* by Sidney C. Port and Charles J. Stone, 2, 477
Bollabás, Béla, *See* Spencer, Joel
Book, Ronald V., *Computers and intractability: A guide to the theory of NP-completeness* by Michael R. Garey and David S. Johnson, 3, 898
Booss, Bernhelm. *See* Douglas, R. G.
Braun, Martin, *Ordinary differential equations* by V. I. Arnold, 2, 514
Bressan, Aldo. *See* Sachs, R. K.
Bridges, D. S. *See* Henson, C. Ward
Brown, Harold. *See* Coxeter, H. S. M.
Bruckner, Andrew M. *See* Waterman, Daniel
Bülow, Rolf. *See* Coxeter, H. S. M.
Bunch, J. R. *See* Birkhoff, Garrett
Burchuladze, T. V. *See* Sneddon, I. N.
Campbell, S. L. *See* Drazin, Michael P.
Cassels, J. W. S. *See* O'Meara, Timothy
Cheney, E. W., *Discontinuous Čebyšev systems* by Roland Zielke, 3, 733
Choquet-Bruhat, Yvonne. *See* Ørsted, Bent
Chui, Charles K. and Ward, Joseph D., *Optimization and approximation* by W. Krabs, translated by Philip M. Anselone and Ronald B. Guenther, 3, 1065
Cigler, Johann. *See* Johnson, B. E.
Cohn, Harvey. *See* Edwards, Harold
Cohn, P. M., *Semigroups and combinatorial applications* by Gerard Lallement, 2, 483
Connors, Edward A., *Metric planes and metric vector spaces* by Rolf Lingenberg, 2, 531
Corwin, Lawrence J., *The theory of Lie superalgebras; an introduction* by M. Scheunert, 3, 904
Coxeter, H. S. M., Errata to *Crystallographic groups of four-dimensional space* by Harold Brown, Rolf Bülow, Joachim Neubüser, Hans Wondratschek and Hans Zassenhaus, 1, 777
Curtain, Ruth F. *See* Russell, David L.
Daley, Robert P., *An introduction to the general theory of algorithms* by Michael Machtey and Paul Young, 2, 187
Dauben, Joseph Warren. *See* Stahl, Stanley H.
Day, Mahlon M., *Compact right topological semigroups and generalizations of almost periodicity* by J. F. Berglund, H. D. Junghenn and P. Milnes, 3, 745
Dellacherie, Claude. *See* Getoor, R. K.
Devlin, Keith J., *Recursion-theoretic hierarchies* by Peter G. Hinman, 2, 190

DeVore, Ron, *Interpolation theory, function spaces, differential operators* by Hans Triebel, **2**, 339
Dieudonné, Jean. *See* Marsden, Jerrold
Dillard-Bleick, Margaret. *See* Ørsted, Bent
Dolezal, V. *See* Saeks, R.
Dongarra, J. J. *See* Birkhoff, Garrett
Douglas, Ronald G., *Topologie und analysis* by Bernhelm Booss; *The Atiyah-Singer index theorem; an introduction* by Patrick Shanahan, **2**, 505
Drazin, Michael P., *Generalized inverses of linear transformations* by S. L. Campbell and C. D. Meyer, Jr., **3**, 894
Dubinsky, Ed, *Schwartz spaces, nuclear spaces and tensor products* by Yau-Chuen Wong, **3**, 762
Dudley, R. M., *Gaussian random processes* by I. A. Ibragimov and Yu. A. Rozanov, **2**, 373
Dydak, Jerzy. *See* Keesling, James
Edwards, Harold, *Algebraic number theory* by Robert L. Long; *A classical invitation to algebraic numbers and class fields* by Harvey Cohn; *Number fields* by Daniel A. Marcus, **2**, 321
Faris, William, *Methods of modern mathematical physics*, vol. III, *Scattering theory* by Michael Reed and Barry Simon; *Methods of modern mathematical physics*, vol. IV, *Analysis of operators* by Michael Reed and Barry Simon, **2**, 522
Fattorini, H. O., *Mathematics of finite-dimensional control systems. Theory and design* by David L. Russell, **3**, 770
Frame, J. Sutherland, *The representation theory of the symmetric groups* by G. D. James, **2**, 485
Galambos, Janos. *See* Ghurye, S. G.
Gamkrelidze, R. V. *See* Hestenes, Magnus R.
Gardner, Robert B., *Invariant theory* by T. A. Springer, **2**, 246
Garey, Michael R. *See* Book, Ronald V.
Gegelia, T. G. *See* Sneddon, I. N.
Gehring, F. W., *Quasiconformal mappings and Riemann surfaces* by Samuel L. Krushkal', **3**, 1062
Gel'fand, I. M. *See* Guillemin, Victor
Getoor, Ronald, *Probabilities and potential* by Claude Dellacherie and Paul-André Meyer, **2**, 510
Ghurye, S. G., *Characterizations of probability distributions* by Janos Galambos and Samuel Kotz, **2**, 256
Gihman, I. I. *See* Stroock, D. W.
Gilewicz, Jacek. *See* Jones, W. B.
Goldstein, Jerome A., *Equations of evolution* by Hiroki Tanabe, **3**, 891
Goodearl, K. R. *See* Armendariz, Efraim P.
Griffiths, Phillip. *See* Lipman, Joseph
Guillemin, Victor, *Generalized functions*: Volume 1, *Properties and operations*, xviii + 423 pp.; Volume 2, *Spaces of fundamental and generalized functions*, x + 261 pp.; Volume 3, *Theory of differential equations*, x + 222 pp.; Volume 4, *Applications of harmonic analysis*, xiv + 384 pp.; Volume 5, *Integral geometry and representation theory*, xvii + 449 pp.; by I. M. Gel'fand and G. E. Shilov, **3**, 758
Gunning, R. C. *See* Kobayashi, Shoshichi
Gustafson, Karl, *Unitary group representations in physics, probability, and number theory* by George Mackey, **2**, 225
Hafner, Everett, *Applied mathematics*: *An intellectual orientation* by Francis J. Murray, **3**, 735
Halpern, Herbert, *Lectures on von Neumann algebras* by Serban Strătilă and László Zsidó, **2**, 488
Harris, Joseph. *See* Lipman, Joseph
Helgason, Sigurdur. *See* Kulkarni, Ravi S.
Henrici, Peter. *See* Birkhoff, Garrett
Henson, C. Ward, *Constructive functional analysis* by D. S. Bridges, **3**, 728
Hestenes, Magnus R., *Principles of optimal control theory* by R. V. Gamkrelidze, **2**, 490

Hinman, Peter G. *See* Devlin, Keith J.
Hofstadter, Douglas R., *The computer revolution in philosophy: Philosophy, science and models of mind* by Aaron Sloman, 2, 328
Husain, T. *See* Namioka, I.
Ibragimov, I. A. *See* Dudley, R. M.
Il'in, Valentin P. *See* Krantz, Steven G.
James, G. D. *See* Frame, J. Sutherland
Jech, Thomas. *See* Kunen, Kenneth
Johnson, B. E., *Banach modules and functors on categories of Banach spaces* by Johann Cigler, Viktor Losert, and Peter Michor, 3, 885
Johnson, David S. *See* Book, Ronald V.
Jones, William B., *Approximants de Padé* by Jacek Gilewicz, 2, 360
Junghenn, H. D. *See* Day, Mahlon M.
Keesling, James, *Shape theory* by Jerzy Dydak and Jack Segal, 2, 537
Kemp, Murray C. *See* Billera, Louis J.
Khaleelulla, S. M. *See* Namioka, I.
Kimura, Yoshi. *See* Billera, Louis J.
Klimow, Gennadi P. *See* Neuts, Marcel F.
Kobayashi, Shoshichi, *On uniformization of complex manifolds: The role of connections* by R. C. Gunning, 2, 193
Komkov, Vadim, *Elliptic systems in the plane* by W. L. Wendland, 2, 203
Kotz, Samuel, *The algebra of random variables* by M. D. Springer, 2, 222
Kotz, Samuel. *See* Ghurye, S. G.
Krabs, W. *See* Chui, Charles K. and Ward, Joseph
Krantz, Steven G., *Integral representations of functions and imbedding theorems,* Vols. I and II by Oleg V. Besov, Valentin P. Il'in, and Sergei M. Nikol'skiĭ, 2, 216
Krushkal', S. I. *See* Gehring, F. W.
Kulkarni, Ravi S., *Differential geometry, Lie groups and symmetric spaces* by Sigurdur Helgason, 2, 468
Kunen, Kenneth, *Set theory* by Thomas Jech, 3, 775
Kupradze, V. D. *See* Sneddon, I. N.
Lallement, Gerard. *See* Cohn, P. M.
Lang, Serge. *See* Baker, Alan
Lang, Serge. *See* Terras, Audrey
Lenard, Andrew, Lehrbuch der Mathematischen Physik, vol. 3, *Quantenmechanik von Atomen und Molekülen* by W. Thirring, 2, 540
Levy, Azriel. *See* Baumgartner, J. E.
Lingenberg, Rolf. *See* Connors, Edward A.
Lipman, Joseph, *Principles of algebraic geometry* by Phillip Griffiths and Joseph Harris, 2, 197
Long, Robert L. *See* Edwards, Harold
Losert, Viktor. *See* Johnson, B. E.
Lutzer, David J., *GO-spaces and generalizations of metrizability* by J. M. van Wouwe, 3, 886
Machtey, Michael. *See* Daley, Robert P.
Mackey, George. *See* Gustafson, Karl
Maki, Daniel P., *Mathematical modelling techniques* by R. Aris, 3, 766
Marcus, Daniel A. *See* Edwards, Harold
Marsden, Jerrold, *Treatise on analysis* by Jean Dieudonné, translated by I. G. MacDonald, 3, 719
Marsden, Jerrold E. *See* Sternberg, Shlomo
Meyer, C. D., Jr. *See* Drazin, Michael P.
Meyer, Paul-André. *See* Getoor, R. K.
Michor, Peter. *See* Johnson, B. E.
Milnes, P. *See* Day, Mahlon M.
Moler, C. B. *See* Birkhoff, Garrett
Murray, Francis J. *See* Hafner, Everett
Nagel, Alexander. *See* Beals, Richard
Namioka, I., *Barrelledness in topological and ordered vector spaces* by T. Husain and S. M. Khaleelulla, 2, 364

Nash, J. C. *See* Birkhoff, Garrett
Neubüser, Joachim. *See* Coxeter, H. S. M.
Neuts, Marcel F., *Bedienungsprozesse* by Gennadi P. Klimow, translated from the Russian by V. Schmidt, 3, 1074
Nikol'skiĭ, Sergei M. *See* Krantz, Steven G.
O'Meara, O. T., *Rational quadratic forms* by J. W. S. Cassels, 3, 741
Ørsted, Bent, *Analysis, manifolds and physics* by Yvonne Choquet-Bruhat, Cecile de Witt-Morette, and Margaret Dillard-Bleick, 3, 878
Pascali, Dan. *See* Webb, Jeffrey R. L.
Port, Sidney C. *See* Blumenthal, R. M.
Precupanu, Th. *See* Berkovitz, Leonard D.
Pritchard, Anthony J. *See* Russell, David L.
Reed, Michael. *See* Faris, William
Riordan, John, Percy *Alexander MacMahon: Collected papers,* Volume I, *Combinatorics,* edited by George E. Andrews, 2, 239
Rozanov, Yu A. *See* Dudley, R. M.
Russell, David L., *Infinite dimensional linear systems theory* by Ruth F. Curtain and Anthony J. Pritchard, 3, 724
Russell, David L. *See* Fattorini, H. O.
Sachs, R. K., *Relativistic theories of materials* by Aldo Bressan, 3, 739
Saeks, R., *Monotone operators and applications in control and network theory* by V. Dolezal, 2, 369
Sburlan, Silviu. *See* Webb, Jeffrey R. L.
Scheunert, Manfred. *See* Corwin, Lawrence J.
Segal, Jack. *See* Keesling, James
Shanahan, P. *See* Douglas, R. G.
Shilov, G. E. *See* Guillemin, Victor
Shoesmith, D. J. *See* Blass, Andreas
Simon, Barry. *See* Faris, William
Skorohod, A. V. *See* Stroock, Daniel W.
Sloman, Aaron. *See* Hofstadter, Douglas R.
Smiley, T. J. *See* Blass, Andreas
Sneddon, I. N., *Three-dimensional problems of the mathematical theory of elasticity and thermoelasticity* by V. D. Kupradze, T. G. Gegelia, M. O. Basheleishvili, and T. V. Burchuladze, 3, 870
Sneddon, Ian N., *Mathematical methods of classical mechanics* by V. I. Arnold; *A course in mathematical physics,* Vol. 1; *Classical dynamical systems* by Walter Thirring, 2, 346
Spencer, Joel, *Extremal graph theory* by Béla Bollobás, 2, 492
Springer, M. D. *See* Kotz, Samuel
Springer, T. A. *See* Gardner, Robert B.
Stahl, Stanley H., *Georg Cantor, his mathematics and philosophy of the infinite* by Joseph Warren Dauben, 2, 214
Sternberg, Shlomo, *Foundations of mechanics* by Ralph Abraham and Jerrold E. Marsden, 2, 378
Stewart, G. W. *See* Birkhoff, Garrett
Stone, Charles J. *See* Blumenthal, R. M.
Strătilă, Serban. *See* Halpern, H.
Stroock, Daniel W., *The theory of stochastic processes.* Vols. II and III by I. I. Gihman and A. V. Skorohod, 2, 388
Stroock, D. W. *See* Williams, David
Tanabe, Hiroki. *See* Goldstein, Jerome A.
Terras, Audrey, *Introduction to modular forms* by Serge Lang, 2, 206
Thirring, W. *See* Leonard, Andrew
Thirring, W. *See* Sneddon, Ian N.
Triebel, Hans. *See* DeVore, Ron
Varadhan, S. R. S. *See* Williams, David
Ward, Joseph, D. *See* Chui, Charles K.
Wasow, Wolfgang, *Differenzenapproximationen partieller Anfangswertaufgaben* by R. Ansorge, 2, 200

Waterman, Daniel, *Differentiation of real functions* by Andrew M. Bruckner, **2**, 232
Webb, Jeffrey R. L., *Nonlinear mappings of monotone type* by Dan Pascali and Silviu Sburlan, **2**, 229
Wendland, W. L. *See* Komkov, Vadim
Whitehead, George W. *See* Adams, J. F.
Williams, David, *Multidimensional diffusion processes* by D. W. Stroock and S. R. S. Varadhan, **2**, 496
de Witt-Morette, Cecile. *See* Ørsted, Bent
Wondratschek, Hans. *See* Coxeter, H. S. M.
Wong, Yau-Chuen. *See* Dubinsky, Ed
van Wouwe, J. M. *See* Lutzer, David J.
Young, Paul. *See* Daley, Robert P.
Zassenhaus, Hans. *See* Coxeter, H. S. M.
Zielke, Roland. *See* Cheney, E. W.
Zsidó, László. *See* Halpern, H.

ABCDEFGHIJ–BAN–89876543210