

INDEX OF VOLUME 56

INDEX OF ABSTRACTS

Subjects:

Algebra and Theory of Numbers, 33, 46, 55, 154, 243, 249, 321, 339, 353, 366, 457, 474, 536.

Analysis, 35, 47, 58, 160, 244, 251, 324, 342, 356, 367, 459, 475, 537.

Applied Mathematics, 38, 51, 61, 172, 246, 253, 326, 345, 360, 371, 462, 539.

Geometry, 40, 52, 62, 178, 247, 253, 327, 348, 361, 372.

Logic and Foundations, 42, 53, 63, 179, 254, 465.

Statistics and Probability, 43, 63, 181, 247, 349, 362, 466.

Topology, 44, 53, 64, 183, 248, 255, 329, 350, 363, 373, 466, 475, 540.

Authors:

Agnew, R. P., 356; Aissen, M., 251; Albert, A. A., 353; Amitsur, A. S., 249; Anderson, R. D., 183, 350; Apostol, T. M., 160, 459; Arnold, B. H., 457; Aronszajn, N., 172; Aulbach, H., 161.

Baer, R., 353; Baiada, E., 161; Beaumont, R. A., 459; Beckenbach, E. F., 58, 357, 367; Becker, H. W., 61, 61; Bell, J. H., 243; Bellman, R., 368; Bergman, S., 161; Berkovitz, L. D., 357; Bers, L., 162, 162; Bing, R. H., 53, 183, 255, 329, 350; Blakers, A. L., 183, 540, 540; Blumenthal, L. M., 178, 361; Boas, R. P., 342, 357; Bohnenblust, H. F., 368; Brahana, H. R., 361; Brauer, A. T., 154; Brauer, R., 46; Brenner, J. L., 457, 457; Brown, B., 250, 339; Brown, J. R., 354; Brownell, F. H., 251; Bruck, R. H., 154, 474, 536; Brunck, H. D., 167, 181; Buck, R. C., 243, 357; Butz, R. K., 321.

Calderón, A. P., 47, 357; Cameron, R. H., 48; Camp, C. C., 358; Campbell, H. E., 33; Carlitz, L., 321, 321, 321; Carruth, P. W., 162; Chapman, D. G., 460; Chen, K. T., 154; Chern, S. S., 53, 54; Chowla, S., 155, 155; Chung, K. L., 349; Civin, P., 460; Clarke, F. M., 354; Clarkson, J. M., 327; Clifford, A. H., 33, 340; Coburn, N., 246; Cohen, L. W., 44, 163, 184; Cohn, H., 155, 243; Conner, W. J., 329; Copeland, A. H., 179; Court, L. M., 253; Cowling, V. F., 163; Coxeter, H. S. M., 348; Currie, J. C., 321.

Danskin, J. M., 163; Darling, D. A., 181; Davenport, H., 155; Davis, H. C., 155, 163; Day, M. M., 46; DeCicco, J., 178, 178; Dekker, D. B., 372; Denby-Wilkes, J. E., 368; Deniston, R. F., 54; Derr, L. J., 329; Derry, D., 373; Diaz, J. B., 345; Diliberto, S. P., 58; Dilworth, R. P., 366; Divinsky, N., 354; Doyle, W., 366; Dubisch, R., 55; Duncan, D. G., 354; Duren, W. L., 324; Durst, L. K., 56; DuVal, P., 328; Dvoretzky, A., 164.

Eberlein, W. F., 164, 358; Elliot, D. R., 247; Ellis, D. O., 46, 243, 474, 474; Epstein, B., 343; Erdős, P., 155; Esser, M. H. M., 52; Evans, R. L., 48; Evans, T., 536, 536; Everett, C. J., 63, 63; Eves, H., 462, 462.

Feld, J. M., 253; Fell, J. M. G., 367; Ficken, F. A., 325; Fine, N. J., 251, 251, 340; Finkbeiner, D. T., 156; Flanders, H., 56, 366; Floyd, E. E., 184, 350; Foote, J. R., 172; Forsythe, G. E., 61; Foster, A. L., 156, 156, 157; Foster, M. C., 40; Franck, A., 48; Frank, E., 244; Fuglede, B., 369; Fullerton, R. E., 358.

Gaddum, J. W., 474; Gale, D., 184, 255; Garabedian, P. R., 35, 537, 538, 538; Garrett, J. R., 322; Geiringer, H., 38, 38, 39; Givens, W., 322; Goffman, C., 44, 163, 184; Goldhaber, J. K., 355; Goldman, O., 475; Goodner, D. B., 164; Goodstein, R. L., 180; Gottschalk, W. H., 329; Graves, L. M., 358; Grosswald, E., 157, 250; Gumbel, E. J., 43; Gustin, W. S., 244.

Hadlock, E. H., 322; Haimo, F., 157, 157; Hall, M., 46; Harary, F., 457; Heins, A. E., 172; Helsel, R. G., 164; Henkin, L., 180; Herriot, J. G., 475, 538; Herstein, I. N., 158; Hestenes, M. R., 165; Hewitt, E., 369; Hille, E., 181; Hinds, A. K., 325; Hochschild, G. P., 457; Hopper, E. H., 322; Horn, A., 56; Hostinsky, L. A., 340; Hu, S. T., 53, 255, 329; Huff, G. B., 328; Hull, R., 323; Hurley, A. C., 340, 340; Hyman, M. A., 175, 346.

Irick, P. E., 362; Isaacs, R., 621.

Jackson, L. K., 367; James, R. C., 58, 165; Jehle, H., 51, 165, 346; John F., 39; Johnson, L. G., 247; Jones, B. W., 158; Jones, F. B., 184, 465.

Kac, M., 349, 349; Kaplan, S., 175; Kaplansky, I., 47; Karlin, S., 368; Karp, S. N., 173, 173, 173, 173, 174; Karush, W., 371; Kasner, E., 178, 178, 178, 254; Keesee, J. W., 330; Kelly, J. B., 355; Kelly, L. M., 247; Kibbey, D. E., 166; Kincaid, W. M., 363; Klee, V. L., 330, 350, 460; Kleene, S. C., 42; Klein, G., 357; Kleinfeld, E., 474, 536; Knebelman, M. S., 463; Koopman, B. O., 43, 166, 460; Korevaar, J., 49; Krzywoblocki, M. Z., 51, 462.

Lakness, R. M., 58; Lanczos, C., 62, 372; Lehner, J., 343; Leipnik, R. B., 182; Lepson, B., 34, 252; Leutert, W., 539; LeVeque, W. J., 158; Levine, J., 328, 348; Levit, R. J., 323; Levitzki, J., 249, 250; Lewis, D. J., 355; Lin, C. C., 172; Lindgren, B. W., 166, 166; Lohwater, A. J., 359; Lorch, E. R., 35, 461, 461; Lorch, L., 252; Loud, W. S., 363; Luke, Y. L., 360; Lyndon, R. C., 158.

McCarthy, E. D., 174; McCoy, N. H., 339; McLaughlin, J. E., 366; MacNeish, H. F., 167; Macon, N., 154, 323; Maharam, D., 343; Mancill, J. D., 325; Mandelbrojt, S., 167; Mann, W. R., 326, 327; Massey, W. S., 183, 540, 540; Mautner, F. I., 34, 158; Meserve, B. E., 47; Meyers, L. F., 174, 174; Michael, E. A., 363; Milgram, A. N., 185; Milkman, J., 35; Miller, K. S., 36, 175, 326; Mitchell, J. M., 244, 359; Mittelman, D., 254; Mo, Y., 463, 463; Mooers, C. N., 346, 349, 539; Moore, C. N., 167, 167; Moore, E. F., 343; Moser, L., 323; Mostafa, H. H., 175; Mostow, G. D., 44; Motzkin, T. S., 40, 179, 179, 349; Mulholland, H. P., 40; Murdoch, D. C., 458, 458, 537.

Nehari, Z., 168, 168; Neumann, B. W., 475; Newman, D. J., 341; Nikodým, O. M., 324; Nims, P. T., 246; Niven, I., 458; Norris, M. J., 49.

O'Brien, G. G., 175; O'Donnell, R. E., 344.

Pall, G., 47; Pan, T. K., 373; Papoulis, A., 168; Peck, J. E. L., 344, 350; Penico, A. J., 159; Perkins, F. W., 168; Phillips, R. S., 369, 370; Piranian, G., 359; Pitcher, E., 44; Prenowitz, W., 41; Protter, M. H., 36.

Rado, T., 168, 541; Ragazzini, J. R., 182; Rainich, G. Y., 361; Ratner, L. T., 185; Reichelderfer, P. V., 168; Reissner, E., 176; Remage, R., 185; Reynolds, R. R., 39; Rich, R. P., 341; Rickart, C. E., 341; Rider, P. R., 363; Ritt, R. K., 359; Ritter, E. K., 176, 327; Roberts, J. H., 327; Robertson, M. S., 252; Robinson, G. de B., 342; Robinson, L. V., 326; Robinson, R. M., 366, 458; Rogers, C. A., 164; Rosenbaum, I., 180; Rosenblatt, M., 349, 466; Rosenbloom, P. C., 166, 344; Ross, A. E., 245; Rosser, J. B., 176, 177, 367; Rothe, E. W., 248; Rothe, J. C., 185; Rubin, H., 36, 182; Rudin, W., 169; Ryser, H. J., 537.

Saltzer, C., 177; Samuelson, P. A., 159; Sangren, W. C., 245, 245; Sard, A., 174, 174; Schatten, R., 169; Schenkman, E., 34; Schwarz, R. J., 175; Schweigert, G. E., 340; Schweitzer, A. R., 42, 42, 42, 43, 53, 254, 254, 355, 458, 459, 463, 464; Schweitzer, M., 59; Scott, W. T., 49; Segal, I. E., 36, 37, 50, 169, 245, 359; Seidel, W., 37; Seidenberg, A., 62; Seth, B. R., 51, 177, 360; Shanks, E. B., 324; Shapiro, G., 344; Sheffer, I. M., 37; Sherman, S., 169, 170, 170, 347; Shiffman, M., 370; Showalter, A. B., 354, 356, 356; Shü, S. S., 52; Slater, M. L., 49; Smith, C. B., 327; Snapper, E., 34, 159; Snyder, W. S., 326; Stamey, W. L., 361; Stein, S. K. B., 464, 466; Steinberg,

R., 57, 57; Steinhardt, F., 170; Stewart, B. M., 244; Stone, M. H., 36; Sun, Y. F., 54; Supnick, F., 464; Swift, J. D., 63; Swingle, P. M., 364; Szász, O., 37, 59, 370; Szegő, G., 59, 170.

Tarski, A., 367; Taussky, O., 342; Taylor, A. E., 59; Thomas, C. J., 49; Thron, W. J., 170; Tricomi, F. G., 370; Trjitzinsky, W. J., 171; Trombley, E. F., 50; Truesdell, C. A., 171, 253, 347; Tucker, A. W., 57.

Ulam, S. M., 63, 63; Ullman, J. L., 50, 171.

Valentine, F. A., 54; Vanderburg, B., 51; Vinograde, B., 356.

Waddell, M. C., 342; Wald, A., 466; Wallace, A. D., 248, 330, 330, 467, 475; Walters, S. S., 60, 371; Wang, H., 465, 465, 465; Ward, J. A., 324; Ward, M., 60; Wasow, W. R., 371, 372; White, P. A., 373; Whiteman, A. L., 57, 367; Whyburn, G. T., 186; Whyburn, W. M., 325; Wilder, R. L., 64; Wilkins, J. E., 246; Wing, G. M., 37, 461; Wolf, F., 60; Wolfgang, W. G., 41; Wolfowitz, J., 182, 466; Wolfson, K. G., 345; Woodbury, M. A., 160, 171, 172; Wouk, A., 345; Wright, J. B., 362.

Yood, B., 539; Young, D. M., 40, 345; Young, G. S., 248.

Zadeh, L. A., 52, 182, 347, 539, 540; Zahorski, Z., 360; Zaldastani, O., 348; Zelinsky, D., 160; Zuckerman, H. S., 369, 459; Zygmund, A., 47.

INDEX OF REPORTS OF MEETINGS AND MISCELLANEOUS ARTICLES

Archibald, R. C. *R. G. D. Richardson, 1878–1949*, 256.

Artin, E., *The influence of J. H. M. Wedderburn on the development of modern algebra*, 65.

Coble, A. B. *Virgil Snyder, 1869–1950*, 468.

Green, J. W. Reports of meetings of the American Mathematical Society: *November Meeting in Pasadena*, 55; *April Meeting in Berkeley*, 365.

Hollcroft, T. R. Reports of meetings of the American Mathematical Society: *October Meeting in New York*, 32; *Annual Meeting of the Society*, 140; *February Meeting in New York*, 249.

International Congress of Mathematicians, 1, 217.

MacNeille, H. M. Reports of meetings of the American Mathematical Society: *April Meeting in Washington*, 332.

Mathematics and the National Science Foundation, 285.

Richardson, R. G. D. See Archibald, R. C.

Snyder, V. See Coble, A. B.

Wedderburn, J. H. M. See Artin, E.

Whyburn, W. M. Reports of meetings of the American Mathematical Society: *April Meeting in Oak Ridge*, 320.

Winger, R. M. Reports of meetings of the American Mathematical Society: *June Meeting in Seattle*, 456.

Youngs, J. W. T. Reports of meetings of the American Mathematical Society: *November Meeting in Chicago*, 45; *February Meeting in East Lansing*, 242; *April Meeting in Chicago*, 352.

INDEX OF BOOK REVIEWS

Archibald, R. C. See *Enciclopedia delle matematiche elementari*.

Beliaev, N. M. See Kachanov, L. N.

Berzolari, L. See *Enciclopedia delle matematiche elementari*.

Birkhoff, G. *Lattice theory*. R. P. Dilworth, 204.

Birkhoff, G. See Tarski, A.

Blanch, G. See *Tables*.

Bochner, S., and Chandrasekharan, K. *Fourier transforms*. I. E. Segal, 526.

- Brillouin, L. See *Electromagnetic theory*.
- Chandrasekharan, K. See Bochner, S.
- Chern, S. S. See Weil, A.
- Cohen, L. W. See Ritt, J. F.
- Coxeter, H. S. M. *The real projective plane*. P. DuVal, 376.
- Dilworth, R. P. See Birkhoff, G.
- DuVal, P. See Coxeter, H. S. M.
- Eilenberg, S. See Wilder, R. L.
- Electromagnetic theory*. L. Brillouin, 375.
- Enciclopedia delle matematiche elementari e complementi con estensione alle principali teorie analitiche, geometriche e fisiche. Loro applicazioni e notizie storico-bibliografiche*, Vol. 3. Ed. by L. Berzolari. R. C. Archibald, 517.
- Fialkow, A. D. See Finzi, B.
- Finzi, B., and Pastori, M. *Calcolo tensoriale e applicazioni*, A. D. Fialkow, 206.
- Floodman, M. M. See Samuelson, P. A.
- Friedman, B. See Truesdell, C.
- Geiringer, H. See *Non-linear problems in mechanics of continua*.
- Gleyzal, A. N. See Kachanov, L. N.
- Hardy, G. H. *Divergent series*. O. Szász, 472.
- Ilyushin, A. A. See Kachanov, L. N.
- James, R. D. See Siegel, C. L.
- Kac, M. See *Proceedings of the Berkeley Symposium on Mathematical Statistics and Probability*.
- Kachanov, L. N., Beliaev, N. M., Ilyushin, A. A., Mostow, W., and Gleyzal, A. N. *Plastic deformation*. I. S. Sokolnikoff, 192.
- Kakutani, S. See Wiener, N.
- MacColl, L. A. See Wiener, N.
- Magnus, W., and Oberhettinger, F. *Formeln und Sätze für die speziellen Funktionen der mathematischen Physik*. M. A. Melvin, 198.
- Marden, M. *The geometry of the zeros of a polynomial in a complex variable*. I. M. Sheffer, 78.
- Melvin, M. A. See Magnus, W.
- Minorsky, N. See Stoker, J. J.
- Mostow, W. See Kachanov, L. N.
- Murray, F. J. See Tricomi, F.
- Non-linear problems in mechanics of continua*. H. Geiringer, 269.
- Oberhettinger, F. See Magnus, W.
- Pastori, M. See Finzi, B.
- Peisakoff, M. P. See Wald, A.
- Proceedings of the Berkeley Symposium on Mathematical Statistics and Probability*. M. Kac, 267.
- Rapoport, A. See Rashevsky, N.
- Rashevsky, N. *Mathematical biophysics*. A. Rapoport, 194.
- Ritt, J. F. *Theory of functions*. L. W. Cohen, 209.
- Ritt, J. F. *Differential algebra*. B. L. van der Waerden, 521.
- Samuelson, P. A. *Foundations of economic analysis*. M. M. Flood, 266.
- Schiff, L. I. *Quantum mechanics*. F. Seitz, 191.
- Segal, I. E. See Bochner, S.
- Seitz, F. See Schiff, L. I.
- Sheffer, I. M. See Marden, M.
- Siegel, C. L. *Transcendental numbers*. R. D. James, 523.

- Sokolnikoff, I. S. See Kachanov, L. N.
 Stoker, J. J. *Nonlinear vibrations in mechanical and electrical systems*. N. Minorsky, 519.
 Szász, O. See Hardy, G. H.
Tables of generalized sine- and cosine-integral functions. Parts I and II. G. Blanch, 196.
 Tarski, A. *Cardinal algebras*. G. Birkhoff, 208.
 Tricomi, F. *Equazione differenziali*. F. J. Murray, 195.
 Truesdell, C. *An essay toward a unified theory of special functions*. B. Friedman, 268.
 Tukey, J. W. See Wald, A.
 van der Waerden, B. L. See Ritt, J. F.
 Wald, A. *Sequential analysis*. M. P. Peisakoff and J. W. Tukey, 200.
 Weil, A. *Variétés abéliennes et courbes algébriques*. S. S. Chern, 202.
 Wiener, N. *Cybernetics*. L. A. MacColl, 73.
 Wiener, N. *Extrapolation, interpolation, and smoothing of stationary time series with engineering applications*. S. Kakutani, 378.
 Wilder, R. L. *Topology of manifolds*. S. Eilenberg, 75.

INVITED ADDRESSES¹

- Ahlfors, L. V., 143.
 Arens, R., 365.
 Bellman, R., 55.
 Besicovitch, A. S. *Parametric surfaces*, 288.
 Boas, R. P., 332.
 Brauer, A. T., 320.
 Bruck, R. H., 45.
 Busemann, H. *The geometry of Finsler spaces*, 5.
 Cesari, L. *Area and representation of surfaces*, 218.
 Chowla, S., 143.
 Coxeter, H. S. M. *Self-dual configurations and regular graphs*, 413.
 Fenchel, W., 365.
 Fox, R. H., 33.
 Frame, J. S., 242.
 Hewitt, E., 456.
 Hille, E. *Lie theory of semi-groups of linear transformations*, 89.
 Loewner, C. *Some classes of functions defined by difference or differential inequalities*, 308.
 Mackey, G. W. *Functions on locally compact groups*, 385.
 MacLane, S. *Duality for groups*, 485.
 Myers, S. B. *Normed linear spaces of continuous functions*, 233.
 Parker, W. V., 320.
 Perlis, S., 242.
 Reidemeister, K. *Complexes and homotopy chains*, 297.
 Samelson, H., 353.
 Selberg, A., 332.
 Siegel, C. L., 249.
 Smiley, M. F., 242.
 Weyl, H. *Ramifications, old and new, of the eigenvalue problem*, 115.
 Whyburn, G. T., 142.
 Wiener, N., 142.
 Youngs, J. W. T. *Topological methods in the theory of Lebesgue area*, 17.

¹ Where title of address is not given, the reference to the Report of the Meeting at which the address was given.