

15/14/30
Liberal Arts and Sciences
Mathematics
Mahlon M. Day Papers, 1934-93

Box 1:

Bibliography, 1982
Publications (3 folders), 1939-82
Correspondence (5 folders), 1940-48, 1963, 1970-86, 1991
 Official Letters, 1936-44
 University of Illinois Correspondence, 1943-46, 1955-63, 1971-86, 1990
 Family, Elizabeth Coone Day and Mrs. Coone, 1950
 Photographs, family, 1950
 Death of Elizabeth Day--correspondence, clippings, copy of final letter, 1951

Brown University

Papers, Introduction to Literature, 1934
Division puzzle, 1937
M. S. Thesis, Function to Function Transformations (2 folders), 1937
Statement of the Department of Mathematics Concerning Day, 1939
Minor Thesis, Distribution of Primes, 1939
Thesis manuscript, notes, 1939
Ph. D. Thesis, Weak and strong regularity conditions, 1939
Convocation, June 17, 1939
Mathematical notes, 1940-41
Under investigation, notes
Course notes
 Jacob D. Tamarkin, Polynomials of Approximation, 1936
 C. R. Adams, Introduction to Analysis, 1936-37
 Differential geometry notes, Math 201-2, 1936-37
 Problems, 1936-37
 J. D. Tamarkin, Theory of Abstract Spaces, 1937
 Algebra notes, 1937-38
 Rough moment problem notes, 1938

Box 2:

J. D. Tamarkin, Measure and Probability notes, 1938-39
Von Neumann notes, 1939-40
Notes, 1940
Elizabeth Day, English 45 (drama), notes and papers, 1940
Banach, "Operations Lineares"
Geology 1 course materials
Math 227, Functional Analysis
Math 228, Tamarkin
Math 232, Differential Equations, notes, Chapter I
 Chapter II
 Chapter III
Complex Variables outline

Manuscripts

Lists
Regular function-to-function transformations, 1938
 L^p paper, 1940
Reflexive spaces which can not be made uniformly convex, 1940

Some more uniformly convex spaces, 1940
 On Linear Methods of Summability, 1940
 "On Linear Methods of Summability" and "A Norm Ergodic Theorem," first versions,
 1940
 "On Linear Methods of Summability" and "A Norm Ergodic Theorem" (3 folders), 1940-
 41
 A Property of Banach Spaces, 1941
 Operations in Banach Spaces, 1942
 Ergodic Theorems for Abelian Semi-Groups, 1942
 Convergence, Closure, and Neighborhoods (2 folders), 1943
 Uniform Convexity III, 1943
 Uniform Convexity in Factor and Conjugate Spaces, 1943
 Oriented Systems, 1943-44
 Cluster Points of Subsequences, 1944
 Every Linear Metric Space Is a Linear Topological Spaces, 1949
 On Criteria of Kananura and Blumenthal for Inner Product Spaces, 1955-59
 On Projections, Mar. 10, 1956
 Semigroups and Means, 1956
 Reviews of Normed Linear Spaces, 1958-60
 On the Basis Problem in Normed Spaces, 1959-61
 Fixed-Point Theorems for Compact Convex Sets, 1960
 Reviews of Normed Linear Spaces, 2nd ed., 1963
 Correspondence on Normed Linear Spaces, 1963-70, 1983
 Convolution, Means and Spectra (2 folders), 1963-64
 Fixed-Point Correction, 1964
 Amenability and Equicontinuity, 1967-68
 Semigroups and Invariant Means, 1968
 Semigroups and Amenability, rough copy, 1968
 Semifinal copy, 1968
 Final copy, 1968
 Errata
 Correspondence, 1969

Box 3:

Normed Linear Spaces that are Uniformly Convex in Every Direction, 1971
 Varieties of Amenable Groups, ca. 1971
 A Geometric Proof of Asplund's Differentiation Theorem, 1972-73
Normed Linear Spaces, 3rd ed., Superreflexive spaces, 1972
Normed Linear Spaces, 3rd ed. (2 folders), 1971, 1973
 Index, 1973
 Part of typescript
 Proofs, 1972-75
 Errata sheets, 1983
 Mimicry in Normed Spaces (2 folders), 1974, 1977
 Invariant Renorming, 1975
 Invariant Renorming of c_0 , m , and L^1 Spaces, ca. 1975
 On a Renorming Theorem of Sz.-Nagy, 1975-76
 Manuscript on lumpy subsets, 1976
 Comments on Notes of Stanojevic et al., 1976-82
 Bade functional paper, 1977-81
 Left Thick to Left Lumpy..., 1979-82

Book review, Berglund, Junghenn, and Milnes, 1980
 Functionally Left Lumpy Sets (3 folders), 1981-84
 "Citation" Classic, 1982
 Convergence and Order (6 folders), 1983-84
 Correspondence, 1984-85
 Inner-Product Potpourri, drafts, reprints, 1989-90
 Basis problem in reflexive spaces, notes
 Borwein's Characterization of Inner Product Spaces
 Rotundity, Smoothness, Duality notes
 Unfixed Points
 Weak containment and amenability, notes

Box 4:

Reviews, Mathematical Reviews (19 folders), 1945-81

Box 5:

Reviews, Mathematical Reviews (2 folders), 1986, 1992

Reviews--correspondence, 1939, 1964-70, 1976-81

Research Grants

Office of Naval Research, 1947-50. 1954
1954-63

Office of Ordnance Research, 1955-56

National Science Foundation (6 folders), 1969-76

Conferences

International Congress of Mathematicians, Cambridge, MA, Aug. 30 - Sept. 6, 1950

Symposium on Convexity, Seattle, June 13-15, 1961

Symposium on Semigroups at Wayne State University, 1967-69

International Symposium on Partial Differential Equations and Geometry of Normed Spaces, Jerusalem, June 19-28, 1972

Wabash International Conference on Banach Spaces, June 25-29, 1973

East Lansing Conference on the Geometry of Metric and Linear Spaces, 1974-75

RNP Conference, notes, Feb. 8, 1975

Seminar on Fixed Point Theory, Halifax, 1975-76

Durham Symposium on the Relations between Infinite Dimensional and Finite Dimensional Convexity, 1975-76

Day Conference (Conference on the Geometry of Normed Linear Spaces), 1983

Factorization of Linear Operators and Geometry of Banach Spaces Conference, 1984

Math Course Materials

1976-85

Math 117, lectures, early 1950s

Math 125, Spring 1979

Math 135, &B1, Fall 1979

Math 140, D2, Fall 1977

Math 141, &C3, Fall 1978

Math 149, 1978-79

Class notes

Math 242 (2 folders), Fall 1975

Math 301, class notes

Math 315 (2 folders), Fall 1985

Math 319 (3 folders), Spring 1978 - Spring 1983

Math 343 notes, exterior forms, Fall 1975
 Math 344 (2 folders), Summer 1985

Box 6:

Math 346, Spring 1982
 Math 361, Summer 1977, Spring 1982
 Math 383 (2 folders), Summer 1983
 Math 391, 1981-82
 Math 430, class notes
 Math 431, class notes
 Math 441, hour exam, Spring 1959
 Notes, chapters I to V
 Notes on bounded variation
 Math 442, notes
 Math 446, class notes
 Math 447, background notes--Introduction to Functional Analysis by A. L. Peressini,
 1963
 Math 450 notes
 Math 469 notes
 Student course papers 1969-75
 American Association for the Advancement of Science Council, 1965-69
 American Federation of Teachers/Union of Professional Employees, 1978-81
 J. F. Berglund, H. D. Junghenn, and P. Milnes, 1984
Bulletin of the American Mathematical Society, refereeing, 1941-44
 Bylaws, 1973-74
 Cairns, S. S., head of Department of Mathematics, 1958
 Capricious Grading Committee (2 folders), 1981-83
 Chou, Ching, 1970
 Church, Alonzo, Coble Memorial Lectures, background material, notes, Sept. 23-25, 1975
 Colleagues, Correspondence with, B - J, 1963-91
 K - Y, 1961-93
 Committee on Support of Research In the Mathematical Sciences (2 folders), 1965-68
 Committee on Undergraduate Programs, 1959-62

Box 7:

Computer Calculus, 1972-74
 Computing Equipment Purchase Committee, 1974
 Day, F., Computer Programming Notebook, 1984
 Fell Seminar
 Friends General Conference, 1980, 1984
 Functional Analysis Seminar notes
 Geometry for Analysts (2 folders), 1975-81
 Groups for Analysts--Amenability
 Iceland, 1975
Illinois Journal of Mathematics (3 folders), 1970-71, 1980, 1983-86
 Improbable Similarities Committee, 1984-85
 Invited Talks, 1961-81
 Karayannakis, Dimitri, 1986
 Kharaghani, H., 1978-79
 Knox College Visiting Examiner, May 1984

Landslad, Magnus B., "On the Bohr topology in amenable topological groups," notes
 Lectures on Linear Spaces, University of Arizona (2 folders), 1960
 LETTER/righter, 1981-83
 Letters of Recommendation (2 folders), 1969-86
 London, Ontario talks, 1983-84
 Mathematical Association of America Executive Committee, Illinois Section, 1962-63
 Mathematical Association of America Visiting Lecturer (3 folders), 1961-66
Mathematical Review editorship, 1949
 Mathematics-Engineering Liaison Committee, 1968
 Megginson, Robert E. (2 folders), 1982-83
 Thesis, 1984
 Notes on amenable semigroups (2 folders)
 Notes--"book queries"
 Notes, mathematical and travel
 Notes on number theory
 Outlines of talks, 1955, 1962-84
 Paterson, Alan L. T., 1976-84
 Phone numbers
 Photograph, 42nd Summer Meeting, Mathematical Organizations of America, 1936
 Reprint Requests, 1958-85
 Retirement Papers, Frances and Mahlon Day (2 folders), 1967, 1972-85

Box 8:

Rockford College, Journals Correspondence, 1983-84
 Schäffer, Juan J., 1977-78
 Science fiction magazine collection, inventory of, ca. 1946
 Smith, Mark, 1977-80
 Staff Information--salaries, promotion, 1963
 Subcommittee on Student Conduct for Graduate Students, 1977-79
 Thesis abstract, "Positive extension of operators"
 Tomita Scratch Paper, 1957
 Translation, Naimark, 1950s
 Sitnikov, early 1950s
 Uhl, J. J. lecture, notes
 University of Illinois Committee on School Mathematics Board, 1964-65
 Vancouver-Edmonton Talks, 1985-86
 Zariski, Oscar, Colloquium Lectures, Abstract Algebraic Geometry, Sept. 1947
 Zelazny, Anthony. 1985-86
 Reprints
 Alexander, Ralph
 Arazy, Jonathan
 Baer, Reinhold
 Bartle, Robert G.
 Berg, I. D.
 Berkson, Earl
 Bogdanowicz, Witold M.
 Boone, William W.
 Browder, Felix E.
 Burkholder, D. L.
 Cairns, Stewart S.
 Chen, Kuo-Tsai

Chou, Ching
Cohen, Jozef
Cohen, Paul J.
Cudia, Dennis F.
Diaz, J. B.
Dor, Leonard E.
Francis, George K.
Granirer, Edmond E.
Gray, John W.

Box 9:

Reprints (cont.)

Haken, Wolfgang
Hamstrom, Mary-Elizabeth
Henson, C. Ward
Hochster, M.
Jerrard, R. P.
Jogdeo, Kumar
Kadison, Richard V.
Kaufman, Robert
Klee, Victor
Lau, Anthony To-Ming
Loeb, Peter A.
Lotz, Heinrich P.
Marti, J. T.
Milnes, Paul
Osborn, Howard
Peck, N. T.
Porta, Horacio
Pu, Lena Chang
Rajagopalan, M.
Rao, Chivukula R.
Reznick, Bruce
Riddle, Lawrence H.
Roberts, James W.
Rosenthal, Haskell P.
Rothman, Neal J.
Rubel, Lee A.
Ruston, A. F.
Saab, Elias
Saab, Paulette
Sato, Ryotaro
Singer, Ivan

Box 10:

Reprints (cont.)

Stolarsky, Kenneth B.
Takeuti, Gaisi
Tomita, Minoru
Tulcea, A. Ionescu

Tulcea, C. Ionescu
 Uhl, J. J., Jr.
 Wetzel, John E.
 Wilde, Carroll O.
 Zippin, M.

Box 11:

Grade Books, 1942-83

Box 12:

(Materials in Boxes 12 and 13 received 9/4/1996)

Albert, A. A.

"The Finite Planes of Ostrom," 1962

"Quadratic Forms Permitting Composition," 1962

Banach Space Conference, Kent University, Notes, 1987

Conference on Measure Theory and Its Application, Northern Illinois University, 1980

Correspondence, 1961, 1963, 1965, 1987, 1989-1990

Distance Sums Bibliography

"Duality Between Smooth and Rotund Spaces," Lecture, 1987

Freyd, Peter

Abelian Categories, (2 folders), 1962

"Functor Categories and their Application to Relative Homology"

Kaplansky, Irving

"Fields"

"Homological Dimension of Rings and Modules"

Kelly, G. M., "Tensor Products in Categories"

Krien and Rutman, "Linear Operators Leaving Invariant a Cone in a Banach Space," notes

LAS Language Requirement Letter Rough Drafts

MacLane, Saunders

"The Axioms for Set Theory," Math 261

"Categorical Algebra," 1963

"Group Extensions by Primary Abelian Groups," 1960

"Natural Associativity and Commutativity"

Manuscripts by Day

"Cluster Points of Subsequences," 1944

"Convergence and Order," ("final copy"), 1984

"An Ergodic Theorem for Bounded Groups"

"I-P Potpourri"

"Means for the Bounded Functions and Ergodicity of the Bounded Representations of Semi- Groups," 1950

"Measure Theory, Integration Theory, Abstract Differentiation..."

"Moore-Smith Convergence," 1987

"Oriented Systems," 1943

"Polygons Circumscribed about Closed Convex Curves," 1948

"Some Characterizations of Inner-Product Spaces," 1947

"Strict Convexity," 1954

Unknown Manuscript Editing

"Yosemite James and the Towers of Doom! or The Quasireflexive Space of R. C. James and its Tower of Conjugate Spaces"

Mapping Constants

Math 221, Notes
 Math 303, Brown University, Summer 1945
 Course Notes
 Student Exams
 Student Exams, Papers, and Course Cards
 Math 442, readings and exams
 Math Notes, University of Chicago
 Math Problem Pages
 Mathematical Association of America, 1971
 Mathematical Reviews, 1986-1991
 1979-1985, no date
 Tianxuan Miao
 "Modules, Diagrams and Functions"

Box 13:

Normal Rings, notes
 Notation for Set Theoretical and Logical Operations
 Notebooks, Math 557, University of Chicago, ca. 1961
 Notes, Mathematical
 Project ALP, Unclassified Working Papers, 1961
 William Lowell Putnam Mathematical Competition Questions, 1951
 Referee's Reports, 1987-1990
 1980-1986
 Research Grant Applications, 1989
 Rings, Notes and Outlines
 Saab, Elias, 1988
 Semi-Simple Lie Algebra, 1962
 Serre, Jean-Pierre, Lie Algebras and Lie Groups, 1964
 Systems of Linear Equations and Gaussian Elimination
 Theses
 Bouwer, I. Z., "Standard Representations of Simple Lie Algebras," 1964
 Day, M. M., "Infinite Dimensional Representations of A_1 ," 1967
 Lemire, Frances W., "Infinite Dimensional Irreducible Representations of Simple Lie Algebras," 1967
 Megginson, Bob, "The Semi-Kladec-Klee Condition and Nearest-Point Properties of Sets in Normed Linear Spaces," 1984
 Thesis pages
 Translations by Day
 Gel'fand and Naimark, " Unitary Representations of Semi-Simple Lie Groups," 1950
 Silov, G. E., "Homogenous Ring Functions"
 Silov, G. E., " On the Decomposition of a Commutative Normed Ring Into a Direct Sum of Ideals," 1954
 Smirnov, N. V., "Limit Distribution for the Terms of a Variational Series," 1957
 Srieder, Yu. A., "Structure of the Maximal Ideals in Rings of Measures with Convolution,"
 Translation Editing, no date
 Visiting Lecturer Materials
 Unitary Spaces and Operator Algebras
 Wong, James C. S.

Box 14:

Correspondence

General, 1948-65 (three folders)

Appointments, 1961

Springer-Verlag re: Normed Linear Spaces, 1960-72, 1970-71

University of Illinois, Business, 1950-54

Letters of Recommendation, 1963-80 (four folders)

Mathematical Association of America

American Association for the Advancement of Science, 1969-71

Committee on Doctor of Arts in Mathematics, 1958-63

Personal File (includes referee's reports), 1956-70 (three folders)

Publications

Reprints, 1955-1980

Arithmetic of Ordered Systems, 1945

Amenable Semigroups, 1956

Normed Linear Spaces, 1958, 1962.

Referree's Reports, 1945-69 (five folders)

Self-Improvement Literature

Cooking, ca. 1950.

Sexual Health, ca. 1950.

Youth-Boy Scouts, ca. 1950.