University of Chicago Library

Guide to the Enrico Fermi Collection 1918-1974

Table of Contents

Descriptive Summary

Identifier ICU.SPCL.FERMI

Title Fermi, Enrico. Collection

Date 1918-1974

Size 35 linear feet (65 boxes)

Repository Special Collections Research Center
University of Chicago Library
1100 East 57th Street
Chicago, Illinois 60637 U.S.A.

Abstract Enrico Fermi (1901-1954), Charles H. Swift Distinguished Service Professor of Physics at the University of Chicago and 1938 Nobel Prize winner in physics, is best known to the general public for having produced the first controlled, self-sustained nuclear chain reaction. This experiment, which was carried out at the University of Chicago on December 2, 1942, made possible the development of the atomic bomb. Fermi's papers document his career as a research physicist and professor in Italy and the United States, including his work with the U. S. Department of War, the Atomic Energy Commission, the Office of Naval Research, the American Physical Society, the Institute for Nuclear Studies at the University of Chicago, and the Los Alamos, Brookhaven, and Argonne National Laboratories. The collection consists primarily of professional correspondence, publications, research and lecture notes, and patent claims. Personal materials in the collection include correspondence, identification papers, schoolbooks, engagement calendars, books from Fermi's personal library, financial records, and a large number of awards and memorials.

Information on Use

Access

Portions of Series IX, Audio-Visual Materials, are currently restricted due to their fragile condition or need for special equipment. The remainder of the collection is open for research.

Citation

When quoting material from this collection, the preferred citation is: Fermi, Enrico. Collection, [Box #, Folder #], Special Collections Research Center, University of Chicago Library

Biographical Note

Enrico Fermi (1901-1954), Charles H. Swift Distinguished Service Professor of Physics at the University of Chicago, and 1938 Nobel Prize winner in physics, is best known to the general

public for his leadership of the Manhattan Project team, which succeeded in obtaining the first controlled self-sustaining nuclear chain reaction. This experiment, which was carried out at the University of Chicago on December 2, 1942, made possible the development of the atomic bomb. Fermi was also among those who developed the bomb, at Los Alamos, New Mexico, to operational level. Even after his acceptance of a professorship of physics at the University of Chicago at the close of the war, he continued to work in an advisory capacity for the Atomic Energy Commission, the Office of Naval Research, and related bodies.

Fermi was born in Rome, Italy, on September 29, 1901, the third child of Alberto and Ida (de Gattis) Fermi. Alberto was employed by the Italian railroads as an administrator; Ida had been a school teacher prior to her marriage. While still a teenager, Fermi developed a strong interest in mathematics, which, under the guidance of Adolfo Amidei, an engineer colleague of Alberto's, developed into an interest in physics too. Also during his adolescence, Fermi, along with his close friend and future physicist Enrico Persico, spent many of his days designing and conducting scientific experiments, including one to determine the precise density of Rome's drinking water. According to Amidei and to the evidence of an early research notebook in this collection, Fermi was a prodigy as a theoretical physicist. In November 1918, just after he turned seventeen, Fermi began his higher education at the Scuola Normale Superiore at Pisa on a scholarship. Less than four years later he received the degree of Doctor of Physics, magna cum laude, from the University of Pisa, based on experimental work that he had conducted on X-rays.

Following his studies in Pisa, Fermi used a fellowship from the Italian Ministry of Public Instruction to study at Göttingen, a university then at the height of its fame in physics. He worked there with Professor Max Born and was a fellow student of Werner Heisenberg, who was to make some of his most important contributions to the field of theoretical physics within the next two years. During the subsequent academic year, Fermi taught at the University of Rome and then, in 1924, at Leyden in Holland, where he worked with Professor Ehrenfest and his pupils, who included Sam Goudsmit. During the next two academic years, Fermi held an appointment at the University of Florence, where he began work on what would later come to be known as the "Fermi-Dirac statistics." The Fermi-Dirac statistics enabled not only a deeper understanding of the conduction of electricity in metals, but also the development of a widely used statistical atom model.

Fermi was appointed Professor of Physics at the University of Rome in 1926, where he lectured until 1938. From 1926 to 1932, he joined other European physicists in working primarily on the theory of atomic structure, which Fermi helped to complete in the form that it is known today. By 1932 his attention shifted to the growing fields of theoretical and experimental nuclear physics. Soon thereafter, he developed his theory of □-ray emission, in which he gave mathematical evidence for the existence of the neutrino. This proved to be one of his major achievements in physics. Working with several collaborators at the University of Rome, including Edoardo Amaldi and Bruno Pontecorvo, Fermi then went on to study the slowing down of the neutron, another recently discovered atomic particle, in hydrogenous materials. By capturing the slow neutron in atomic nuclei, he made a comprehensive study of a big class of

artificially radioactive substances. His work on neutron physics was recognized in 1938 when he received the Nobel Prize for Physics. The techniques and theories that he worked out during this period were also those that he later used in the "exponential pile" experiments which led to the development of the first controlled uranium-graphite reactor.

During this remarkably productive period scientifically, Fermi was finding the political situation in Italy increasingly intolerable. In 1928 he had married Laura Capon, the daughter of a respected Jewish family in Rome. While Fermi, like many of his colleagues in this period, was a member of the Fascist Party for reasons of professional necessity, Italy's enactment of anti-Semitic racial laws in 1938 caused him to consider emigration as a protection for his family. That family now included two children, Nella and Giulio. Recognizing the occasion of his family's travel to Stockholm for the Nobel awards ceremony in 1938 as an opportunity for escape, Fermi and his family departed for the United States from the ceremony. Shortly thereafter he was appointed to a professorship of physics at Columbia University.

Soon after his arrival in the United States, Fermi became instrumental in sparking the U. S. government's interest in developing atomic energy for military purposes. Working with other physicists at the Metallurgical Laboratory in Chicago, which had been established for precisely this reason, he led a team to design and construct an exponential pile in an empty room under one of the university's athletics fields. The first-ever controlled self-sustaining nuclear chain reaction took place in that pile on Decmber 2, 1942. During the subsequent two years, Fermi conducted various experiments using the reactor, as well as assisted in the development of a larger reactor at the nearby Argonne Laboratory. On July 11, 1944, Enrico and Laura Fermi were naturalized as citizens of the United States.

Following a brief period during which he worked primarily with the DuPont Company developing plutonium on an industrial scale, Fermi moved his family in August 1944 to Los Alamos, New Mexico, where the War Department's top-secret Manhattan Project to develop the atomic bomb was already well underway. As Associate Director of the project, he oversaw all experimental physics projects already in progress, conducted a few experiments on neutron cross section measurments, and observed the first test of the bomb at Alamogordo, New Mexico. Fermi then served as one of four scientific consultants to President Truman's advisory Interim Committee, which, after lengthy deliberation, recommended that the bomb be used for military purposes. Fermi received many citations and awards for his contributions to the war effort, including the Congressional Medal for Merit in 1946.

Resuming his academic work in 1946 at the University of Chicago as the Charles H. Swift Distinguished Professor of Physics, Fermi became a member of the newly formed Institute for Nuclear Studies at the university (the present Enrico Fermi Institute for Nuclear Studies). During the subsequent eight years of professional activity, he assisted in the development of Chicago's 450 Mev synchrocyclotron and of several electronic calculating machines. He worked in an advisory capacity to the Atomic Energy Commission and its associated laboratories, served

as the President of the American Physical Society in the early 1950s, delivered many lectures, taught several university courses, and published numerous papers on various theoretical and experimental topics in physics. These papers included studies of neutron diffraction by crystals, of analogies between the properties of neutrons and optical waves, of the physics of mesons, of the origin of cosmic rays, and, in the last year of his life, of the polarization of proton beams on scattering.

Fermi spent the summer of 1954 in France, Germany, and Italy where he toured, delivered lectures, and reunited with various European friends, relatives, and colleagues. He was already in the final stages of an incurable cancer. Returning to Chicago in September 1954, he spent the last two months of his life visiting with friends and family and undergoing various medical procedures. Just days before he died, the Atomic Energy Commission created a special award for Fermi in recognition of his distinguished service to the nation as a scientist.

Enrico Fermi died in his sleep at his Chicago home on November 29, 1954.

Scope Note

The Enrico Fermi Collection has been divided into nine series:

Series I contains personal papers.

Series II contains Fermi's correspondence.

Series III contains Fermi's academic papers.

Series IV contains the papers related to professional organization.

Series V contains papers relating to the federal government.

Series VI contains research by Fermi.

Series VII contains Fermi's notebooks and course notes.

Series VIII contains writings.

Series IX contains audio-visual materials.

The collection relates primarily to Fermi's academic and professional career, and the heaviest concentration of material relates to the years 1939-1954, the period of his residence in the United States. Fermi was a prolific researcher and letter writer, as well as a frequent lecturer, and thus much of the collection consists of research notes, correspondence, and published and unpublished articles, lectures, books, and courses. Divisions between series are not strict and the subjects often overlap within series subdivisions. Because many of Fermi's closest friends were also professional colleagues, the classification of "personal" is reserved strictly for materials that are biographical or that contain no recognizably professional content. Most correspondence is located in Series II, but some letters can also be located in Series I, III, IV, V, VI, and VII (see the Series II series description for a more complete outline of the types of correspondence housed in these locations). Distinctions between academic and professional work must be somewhat arbitrary in Fermi's case, so for the purposes of this collection Series III, Academic Papers, contains only those materials that pertain exclusively to the work of teaching and/or of academic administration. Much of Series VI, Research, contains research notes organized according to Fermi's own cataloging system. Series VII, Notebooks and Course Notes, contains papers that relate in some instances to research and, in others, to academic work: it has been designated a separate series because Fermi himself collected these papers separately in notebooks.

Related Resources

The following related resources are located in the Department of Special Collections:

http://www.lib.uchicago.edu/e/spcl/select.html

Subject Headings

- Fermi, Enrico, 1901-1954
- Oppenheimer, J. Robert, 1904-1967
- U.S. Atomic Energy Commission
- University of Chicago. Dept. of Physics
- Nuclear reactions
- Nuclear energy -- Research
- Physicists
- Nuclear physicists

INVENTORY

Series I: Personal

Subseries 1: Biographical

Box 1
Folder 1
Biographical materials
- Postcard depicting Fermi when he was a professor at the University of Rome, undated
- Press release of Nobel Prize in Physics, 1938

- Chronology, typescript with annotations in an unknown hand, undated
- Biographical sketches of Enrico Fermi, unattributed mimeographs and Typescripts, undated
- "Notizie sopra la carriera didattica e scientifica di Enrico Fermi," typescript, presumably by Fermi, undated
- Enrico Fermi, "Notizie Sulla Carriera Scientifica del Dott. Enrico Fermi," mimeograph, May 30, 1924
- Biographical notice on the occasion of the award of Fermi's doctorate in physics by the University of Pisa,1922
- "Enrico Fermi: Whither Atomic Power?," unattributed typescript, undatedNewspaper clippings on the first atomic pile
- Reprint of the 1947 Congressional Record entry on the award of Fermi's Medal for Merit
- Proof of biographical notice in The American Catholic Who's Who "Enrico Fermi: Honors and Awards," mimeograph, 1954
- "Enrico Fermi, Honors," typescript, undated.
- Anecdote about Fermi, typescript, unattributed, undated
- Newspaper clippings on Fermi's AEC award in 1954

Box 1

Folder 2

Correspondence, Adolfo Amidei to Emilio Segrè concerning the young

- Fermi's early scientific education, November 25, 1958, holograph photocopy, and typed transcript of the letter

Box 1

Folder 3

Edoardo Amaldi, "Enrico Fermi, premio Nobel 1938 per la fisica," Società Italiana per il Progreso Delle Scienze, 1938

Box 1

Folder 4

"Enrico Fermi - Nobel Man in Physics for 1938," The Scientific Monthly 49 (August 1939), 182-184

Box 1

Folder 5

H. D. Smyth, General Account of the Development of Methods of Using Atomic Energy for Military Purposes: Under the Auspices of the United States Government, 1940-1945, August 1945

Box 1

Folder 6

Press release on the occasion of the fourth anniversary of the first self-sustaining nuclear chain reaction, U. S. War Department, December 1, 1946

Box 1

Folder 7

Henry L. Stimson, "The Decision to Use the Atomic Bomb," reprint from Harper's Magazine 194 (February 1947)

Box 1

Folder 8

Enrico Fermi, Rome: Accademia Nazionale dei Lincei, 1953

Box 1

Folder 9

Transcript of Senate proceedings announcing Fermi's award from the AEC, Congressional Record, November 16, 1954, pp 14946-14950

Box 1

Folder 10

Laura Fermi, Atoms in the Family, French and Italian Translations

- Atomes en famille, translated by Francois Fosca, Paris: Fallimard, 1955
- Atomi in Famiglia, Verona: Arnoldo Mondadori, 1954

Box 1

Folder 11

Laura Fermi, Atoms in the Family, German and Japanese Translations

- Mein Mann und das Atom, translated by A. L. Wentzel, Dusseldorf-Koln: Eugen Diederich, 1956
- (Japanese Translation), Hosei: Hosei University Press, undated

Box 2

Folder 1

Official documents

- Declaration of Intention and Petition for Naturalization for Enrico Fermi and Laura Fermi, photocopy from the National Archives, Great Lakes Region, Chicago
- Certificate of Naturalization
- Birth certificate
- Baptism certificate (donated by Nella Fermi Weiner)
- Census report of Fermi's property in foreign countries

Box 2

Folder 2

Licenses and identification cards, including U. S. passports, social security card, and Los Alamos AEC identity badge

Box 2

Folder 3

AEC "Personnel Security Questionnaire," with accompanying correspondence, 1953

Box 2

Folder 4

School papers, including childhood penmanship exercise books, and typescript English language exercises and word lists, with pronunciation guides in manuscript, undated

Box 2

Folder 5

Miscellaneous manuscripts and notes from student days

Box 2

Folder 6

Pocket engagement calendars, 1938-1944, 1946-1949

Box 2

Folder 7

Pocket engagement calendars, 1950-1955

Box 2

Folder 8

Royalty reports from Nicola Zanichelli, Bologna, 1930, 1946, and University of Chicago Press, 1976-1977

Box 2

Folder 9

Miscellaneous financial records; City of Chicago parking ticket, 1949

Box 2

Folder 10

Correspondence concerning TIAA/CREF life insurance policy, 1954-1956

Subseries 2: Personal Papers

Box 3

Daily engagement calendars, 1946-1953

Subseries 3: Honors

Box 4

Folder 1

Correspondence about honors, arranged by date, 1938-1950

- Henning, Pleijel (Nobel Prize)
- Woodward, Stanley (Hughes Medal, Royal Society of London)
- Groves, L. R. (Congressional Medal for Merit)
- Eisenhart, L. P. (Lewis Prize, American Philosophical Society)
- Gillet, Aristide (Trasenster Medal, Association of Graduate Engineers of the University of Liège)
- Woodward, Stanley (Trasenster Medal, Association of Graduate Engineers of the University of Liége)
- Richey, J. E. (Honorary Fellow, Royal Society of Edinburgh)
- Neel, Louis (declined honorary doctorate, University of Grenoble)
- Adrian, L. D. (election to membership, Royal Society)
- Herpers, Richard (Barnard Medal, Columbia University and the
- National Academy of Sciences)

Box 4

Folder 2

Correspondence about honors, arranged by date, 1951-1954

- Fetridge, Harrison (Hall of Fame, Popular Mechanics Magazine)
- Saha, M. N. (Dr. Bimal Churn Law Gold Medal, Indian Association for the Cultivation of Science)
- Burhoe, Ralph W. (Rumford Medal, American Academy of Arts and Sciences, includes mimeograph of typescript summarizing Fermi's paper at the Rumford Symposium)
- Lacorte, John (honorary president nomination, Italian Historical Society of America)
- Wolf, Karl (Planck Medal, Verband Deutscher Physikalischer Gesellschaften and German Physical Societies)
- Lovino, Antonio F. (Italian-American Charitable Society award, includes typescript of Fermi's acceptance speech)
- Strauss, Lewis (AEC citation and award)
- Hickenlooper, Bourke B. (AEC citation and award)

Box 4
Folder 3
"Laurea," certificate of graduation, University of Pisa, July 7, 1922 Diploma from the Royal Superior Normal School, the University of Pisa, July 7, 1922
- Libretto del Tiro a Bersaglio, Societa del Tiro a Segno Nazionale di Pisa, 1921, 1922

Box 4
Folder 4
Teaching certificate from the Italian Minister of Public Instruction, March 2, 1925
- Certificate of notification of the granting of the Medaglia Metteucci by the Società Italiana delle Scienze, December 1926
- Appointment as temporary professor of theoretical physics in the Royal University of Rome, January 1, 1927
- Election to the Royal Academy of Science of Turin, August 8, 1928

Box 4
Folder 5
Nomination to be Academician of Italy, March 22, 1929, signed by Benito Mussolini
- Appointment by Victor Emmanuel to the Italian Academy, class of physical science, mathematics, and natural science, March 26, 1929
- Election to the Royal Academy of Italy, April 10, 1929

Box 4
Folder 6
Appointment to the Professorship of Theoretical Physics in the University of Rome, March 26, 1930
- Notice of award of bestowal of doctorate, honoris causa, in the University of Utrecht, July 20, 1936
- Nomination to the National Council of Research, June 1, 1939

Box 4
Folder 7
Certificate of election to membership, American Philosophical Society, Philadelphia, April 21, 1939
- Certificate of appointment to the American Physical Society's Committee on Judging Papers of Dubious Value, Princeton, NJ, December 29, 1941
- Certificate, Hughes Medal of the Royal Society, November 30, 1942
- Certificate, U.S. Office of Scientific Research and Development for services during World War II, Washington, DC, March 1, 1945
- Citation for service on the Manhattan Project, U. S. War Department, Army Service Forces, Corps of Engineers, Manhattan District, August 6, 1945, with sterling silver pin and accompanying cover letter from Major General L. R. Groves
- Certificate of Honor for Meritorious Service from The Chicago Sun, Chicago, October 30, 1945
- List of membership of the Accademia Nazionale dei Lincei, Rome, December 1, 1945

Box 4
Folder 8
Certificate, Medal for Merit of the United States of America, January 12, 1946, signed by Harry Truman
- Citation, Medal for Merit of the United States of America, signed Harry Truman

Box 4
Folder 9

Franklin Institute report of work and bestowal of the Franklin Medal, Philadelphia, January 8, 1947

- Certificate of election to Fellowship in the American Academy of Arts and Sciences, Boston, May 13, 1948, with accompanying pamphlet on the history of the academy
- Certificate, Donegani Medal, Accademia Nazionale dei Lincei, Rome, June, 1948

Box 4
Folder 10

Photocopies of Enrico Fermi documents in the Italian State Archives, 1929-1930

- Unidentified document regarding Fermi's nomination to Academician of Italy, March 19, 1929, typescript, 1 leaf
- Mussolini to Fermi and others, March 21, 1929, telegram
- Fermi to Mussolini, March 24, 1929, telegram, typescript, 1 leaf
- Royal decree naming Fermi Academician of Italy, March 26, 1929, typescript, 1 leaf
- Royal decree nominating Fermi secretary of the Class of Physical, Mathematical, and Natural Sciences of the Royal Academy of Italy, September 27, 1929, typescript, 1 leaf
- Mussolini to Fermi, September 27, 1929, telegram, typescript, 1 leaf
- Description of organization of the National Institute of Physics, March 11, 1930, typescript, 2 leaves
- President of Council of Ministers to Ministry of National Education regarding the National Institute of Physics, March 20, 1930, holograph, 1 leaf
- Ministry of National Education to President of the Council of Ministers, April 3, 1930, letter, typescript, 2 leaves
- President of the Council of Ministers, document regarding proposed transformation of the Institute of Physics of the University of Rome into the National Institute of Physics, April 16, 1930, typescript, 2 leaves
- President of the Council of Ministers to Fermi, April 20, 1930, letter, holograph, 1 leaf
- President of the Council of Ministers to unknown recipient, April 20, 1930, holograph, 1 leaf
- Photocopies of Enrico Fermi documents in the Italian State Archives, 1933-1937
- Fermi to Bordoni, January 2, 1933, letter, typescript, 1 leaf
- Ministry of Foreign Affairs to unknown recipient, April 18, 1933, express telegram, typescript and holograph, 1 leaf
- National Council of Research - Report of the Subcommittee for Physics, January 7, 1934, typescript, 11 leaves
- Mussolini to Fermi, March 30, 1934, telegram, typescript, 1 leaf
- Photocopies of Enrico Fermi documents in the Italian State Archives, 1933-1937
- Fermi to Bordoni, June 26, 1934, letter, typescript, 1 leaf
- Ministry of Foreign Affairs to Ministry of National Education regarding Fermi, May 27, 1935, express telegram, typescript, 1 leaf
- Ministry of Foreign Affairs to Ministry of National Education regarding Fermi, June 19, 1936, telegram, typescript, 1 leaf
- Ministry of Foreign Affairs to Italian Legation, Vienna, regarding Fermi, July 11, 1936, telegram, typescript, 1 leaf

- Prefecture of Turin to Questore (Chief Constable) of Rome regarding Fermi, February 19, 1937, letter, typescript, 1 leaf
- Questura of Rome to Ministry of Interior regarding Fermi, February 27, 1937, letter, typescript, 1 leaf
- Ministry of National Education to President of the Council of Ministers, September 1, 1937, telegram, typescript, 1 leaf
- Undersecretary of State, President of Council of Ministers to Minister of National Education, September 3, 1937, telegram, typescript, 1 leaf
- Ministry of Foreign Affairs to Italian National Commission of Intellectual Cooperation, November 25, 1937, telegram, typescript, 1 leaf
- Ministry of Foreign Affairs to Italian National Commission of Intellectual Cooperation, December 13, 1937, telegram, typescript, 1 leaf
- Formichi to President of the Council of Ministers, December 17, 1937, letter, typescript, 1 leaf

Box 4

Folder 12

Photocopies of Enrico Fermi documents in the Italian State Archives, 1938

- Federzoni, President of Reale Accademia d'Italia to Mussolini, September 2, 1938, letter, typescript, 1 leaf
- Minister of National Education to President of Council of Ministers regarding Fermi, September 20, 1938, letter, typescript, 1 leaf
- Ministry of Foreign Affairs to Ministry of National Education regarding Fermi, October 3, 1938, telegram, typescript, 1 leaf
- Undersecretary of State, President of Council of Ministers to Ministry of Foreign Affairs, October 4, 1938, telegram, typescript, 1 leaf
- Undersecretary of State, President of Council of Ministers to Ministry of National Education, October 1938, telegram, typescript, 1 leaf
- Fermi to Bordoni, November 12, 1938, letter, holograph, typescript, 1 leaf
- B. A. Quintavalle to President of Council of Ministers, November 19, 1938, letter, typescript, 1 leaf
- Photocopies of Enrico Fermi documents in the Italian State Archives, 1938
- Minister of National Education to President of Council of Ministers regarding Fermi, November 19, 1938, letter, typescript, 1 leaf
- G. Marzano, Prefect of Milan, to President of Council of Ministers regarding Fermi, November 20, 1938, letter, typescript, 1 leaf
- Minister of National Education to President of Council of Ministers regarding Fermi, November 23, 1938, letter, typescript, 1 leaf
- Ministry of Foreign Affairs to Ministry of National Education regarding Fermi, November 25, 1938, telegram, typescript, 1 leaf
- President of Council of Ministers to Ministry of Foreign Affairs, November 28, 1938, letter, holograph, 1 leaf
- Ministry of Foreign Affairs to Ministry of National Education regarding Fermi, November 30, 1938, telegram, typescript, 1 leaf
- Undersecretary of State to Ministry of National Education regarding Fermi, December 3, 1938, letter, typescript and holograph, 1 leaf
- Fermi to Osvaldo Sebastiani, December 3, 1938, letter, typescript, 1 leaf

- President of Council of Ministers, memo for Mussolini, regarding permission for Fermi to travel to Stockholm to accept his Nobel Prize, December 6, 1938, typescript, 1 leaf
- Undersecretary of State, President of Council of Ministers to Ministry of National Education, December 7, 1938, typescript, 1 leaf
- Minister of National Education to President of Council of Ministers, December 8, 1938, telegram, typescript, 1 leaf
- Ministry of Foreign Affairs to President of Council of Ministers andothers regarding Scientific Congress in Calcutta, December 8, 1938, telegram, typescript, 3 leaves
- Unidentified document from Milan regarding the snubbing of Fermi by officials at a ceremony honoring him for winning the Nobel Prize, in response to his expression of disapproval of the government's anti-Semitic campaign, December 10, 1938, typescript, 1 leaf
- Unidentified document from Milan regarding Fermi's failure to return to Italy after receiving the Nobel Prize in Stockholm, December 23, 1938, typescript, 1 leaf

Box 4

Folder 13

Photocopies of Enrico Fermi documents in the Italian State Archives, 1939

- Unidentified document from Milan regarding Fermi, January 4, 1939, typescript, 1 leaf
- Federzoni to Mussolini regarding Fermi, January 5, 1939, letter, typescript, 1 leaf
- Photocopies of Enrico Fermi documents in the Italian State Archives, 1939
- Newspaper clipping from Il Nuovo Avanti regarding Fermi's departure from Italy, January 7, 1939, mounted with typescript caption, 1 leaf
- Unidentified document regarding Fermi's decision to leave Italy, January 7, 1939, typescript, 1 leaf
- Memorandum regarding Fermi's political position, February 6, 1939, typescript, 1 leaf
- Unidentified document regarding Fermi's decision to remain abroad due to the Italian anti-Semitic campaign, February 7, 1939, typescript, 1 leaf
- Document from the Chief of Police, Rome, seeking information to clarify Fermi's political position, February 28, 1939, typescript, 1 leaf
- Italian Consulate General, New York, to "Signor Incaricato d'Affari" regarding Fermi, February 28, 1939, letter, typescript, 1 leaf
- Ministry of National Education to President of Council of Ministers and others regarding Fermi, March 4, 1939, letter, typescript, 2 leaves
- Questura of Rome to Ministry of Interior regarding Fermi, March 7, 1939, letter, typescript, 1 leaf
- Questura of Rome to Ministry of Interior regarding Fermi, May 5, 1939, letter, typescript, 2 leaves
- Inspector General of Security D'Andrea to Inspector General of Security Menechincheri regarding political line of Professor Davide Fieschi, May 8, 1939, telegram, typescript, 1 leaf
- Unidentified document regarding Fermi, May 9, 1939, letter, holograph, signed (illegible), 2 leaves
- Minister of National Education to President of Council of Ministers and Royal Academy of Italy regarding Fermi, May 10, 1939, letter, typescript, 1 leaf
- Ministry of Foreign Affairs to President of the Council of Ministers regarding Fermi, May 16, 1939, telegram, typescript, 1 leaf

- Royal Academy of Italy to President of Council of Ministers regarding Fermi, May 25, 1939, letter, typescript, 1 leaf
- Undersecretary of State to Ministry of Education and Ministry of Foreign Affairs regarding Fermi, June 8, 1939, letter, typescript and holograph, 1 leaf
- Italian Consulate General, New York, to A. Collona, Italian Ambassador, Washington, DC, regarding Fermi, June 15, 1939, letter, typescript, 1 leaf A. Collona, Italian Ambassador, Washington, DC, to Ministry of Foreign Affairs, June 19, 1939, telegram, typescript, 1
- Photocopies of Enrico Fermi documents in the Italian State Archives, 1939
- Ministry of Foreign Affairs to Ministry of Interior, July 26, 1939, telegram, typescript, 1 leaf
- Chief of Police to Ministry of National Education, July 26, 1939, letter, typescript, 1 leaf

Box 4

Folder 14

Photocopies of Enrico Fermi documents in the Italian State Archives, 1940-1941

- A. Colonna, Italian Ambassador, Washington, DC, to Ministry of Foreign Affairs regarding Fermi's political attachments, September 9, 1940, telegram, typescript, 1 leaf
- Ministry of Foreign Affairs to Ministry of Interior, January 21, 1941, telegram, typescript, 1 leaf
- Document of Consulate General of Italy, New York, regarding Fermi's political attachments in America, typescript, 1 leaf
- Another document bearing the same text as the previous one, January 21, 1941, typescript, 1 leaf
- Resumés on Fermi, January 21, 9141, typescript, 3 leaves; holograph, 4 leaves

Box 4

Folder 15

Certificate of degree, Rockford College, Doctor of Law, February 23, 1947, in black leather folder with gold embossed lettering

Box 4

Folder 16

Certificate of degree, Rochester University, Doctor of Science, January 4, 1952, in black leather folder with gold embossed lettering

Box 4

Folder 17

Nobel Prize Book, December 10, 1938, blue binding with gold embossed lettering, gilt-edged pages

Box 4

Folder 18

Certificate of award, Gold Medal of the Italian-American Charitable Society, Boston, October 11, 1954, black leather folder

Box 5 (Medals)

Italian-American Charitable Society, Inc., October 1954, gold, 1.5 inches in diameter (boxed)

Box 5 (Medals)

Dr. Bimal Churn Law Gold Medal of the Indian Assn. for the Cultivation of Science, 1951, gold, 2 inches in diameter (boxed)

Box 5 (Medals)

Franklin Medal of the Franklin Institute, April 1947, gold, 2.5 inches in diameter (boxed)

Box 5 (Medals)

American Academy of Arts and Sciences Rumford Medal for Discoveries in Light and Heat, 1953, gold, 2.5 inches in diameter (boxed)

Box 5 (Medals)

Accademia Nazionale dei Lincei Medaglia Donegani per la Chimica, 1948, gold, 2 inches in diameter (boxed)

Box 5 (Medals)

Alfred Nobel Prize Medal, 1938, gold, 2.5 inches in diameter (boxed)

Box 5 (Medals)

Columbia College Barnard Medal for Meritorious Service to Science, June 1950, 3 inches in diameter (boxed)

Box 5 (Medals)

Congressional Medal of Merit, United States of America (with ribbon), 1946, gold, 1.5 inches in diameter (boxed)

Box 5 (Medals)

Hughes Medal of the Royal Society, gilt, 2.25 inches in diameter (unboxed)

Box 5 (Medals)

Reaction en Chaine Medal, 1939, bronze, 2.5 inches in diameter (unboxed)

Box 5 (Medals)

University of Liège Trasenster Medal of the Assn. Des Ingenieurs sortis de l'École de Liège, February 1947, nickel-coated bronze, 2.75 inches in diameter (unboxed)

Box 5 (Medals)

Premio Matteucci Medal of the Società Italiana delle Scienze, 1926, gold, 1.75 inches in diameter (unboxed)

Box 5 (Medals)

Alessandro Volta Medal, Como, 1949, silvered bronze or nickel, 2.25 inches in diameter (unboxed)

Box 5 (Medals)

Princeton Bicentennary Medal, 1946, bronze, 3 inches in diameter (unboxed) George Westinghouse Centennial Medal, 1946, bronze, 2.75 inches in diameter (unboxed)

Box 5 (Medals)

Columbia University, World War II, for Participation in the Work of the Division of War Research, recognition plaque, bronze, 2 3/8 x 4 1/8 inches (unboxed)

Box 5 (Medals)

Unidentified medal, "Henri Becquerel, 1852-1908; [obverse] Radioactivite, 1896," undated, bronze, 2.5 inches in diameter (unboxed)

Box 5 (Medals)

Caraffa, Andrea, e Societate Jesu, Elementorum Physicae Mathematicae, 2 vols. (Rome, 1840): in December 1971, Professor Emilio Segrè of Californai formally presented to the library this two-volume work, which is signed by Fermi and assumed to be annotated by his hand. In April 1972, these volumes were rebound by Barbara Giuffrida of Florence and provided with a plain buckram box

Box 6a
American Philosophical Society fellowship, Philadelphia, April 21, 1939
Box 6a
National Academy of Sciences of the U.S.A., membership, April 24, 1945
Box 6a
Franklin Institute, Philadelphia, honorary membership, April 16, 1946
Box 6a
Order of the Sons of Italy in America, honorary member, New York, 1947
Box 6a
Royal Society, London, fellowship, May 5, 1950
Box 6a
Honorary Doctor of Science, Washington University, February 22, 1946
Box 6a
Honorary Doctor of Science, Columbia University, June 4, 1946
Box 6a
Certificate of honorary degree, Doctor of Science, Heidelberg University, June 30, 1936, brown leather folder
Box 6b
Certificate of honorary degree, Doctor of Science, Yale University, July 7, 1946, blue folder with gold-embossed lettering
Box 6b
Certificate of election to honorary membership in the Swedish Engineers' Society of Chicago, December 10, 1954, framed
Box 6b
Certificate of honorary degree, Doctor of Science, Harvard University, June 10, 1948, red leather folder with gold-embossed lettering
Box 6b
Award of Merit for Contributions to Basic Neutron Physics and the Achievement of the Controlled Nuclear Chain Reaction, by the President of the U.S.A. and the Atomic Energy Commission, Washington, DC, December 2, 1954, in a brown leather folder with gold-embossed lettering, inside a wooden box, inside a blue wool dust jacket
Box 6c
Folder 1
Report on a Public Information Project, 1942-1962, Division of Public Information, March 1963, 62pp Report on the press campaign and commemorative events celebrating the twentieth anniversary of the first atomic pile
Box 6c
Folder 2
Photograph with mat, 13 7/8" x 17", of a bronze medal, obverse, with head of Fermi and legend "Enrico Fermi Award, Scientia Progressum, 1901-1954"
Box 6c
Folder 3
Certificates of merit and of election to membership Diploma of recognition and merit, Regia Tavrinensis Academia, May 27, 1918
- Member, Società Italiana delle Scienze o dei XL, February 12, 1933
- Correspondent, Academia Brasileira de Ciencias, August 14, 1934

- Diploma of recognition and merit, Kaiserlich Deutsche Academie der
- Naturforscher, February 16, 1935
- (Rolled separately) Honorary Member, Accademia Gioenia di Scienze Naturali, June 24, 1931
- Certificate of award, Nobel Prize in Physics, Stockholm, December 10, 1938, blue leather folder with gold-embossed lettering, inside a blue box

Subseries 4: Memorials

Box 7
Folder 1
Transcripts of radio and television reports on Fermi's death, November 28-29, 1954
Box 7
Folder 2
Clippings from English language newspapers on Fermi's death
Box 7
Folder 3
Clippings from English language newspapers and magazines on Fermi's death
Box 7
Folder 4
Clippings from foreign language newspapers on Fermi's death
Box 7
Folder 5
Clippings from foreign language newspapers on Fermi's death
Box 7
Folder 6
Clippings from foreign language newspapers on Fermi's death
Box 7
Folder 7
Typescript of prayer read at Fermi's funeral; press release announcing American Physical Society's memorial session in honor of Fermi, April 29, 1955, two copies
Box 7
Folder 8
Unpublished eulogies, commemorative lectures and essays, 1954-62 Bernard Feld, "Enrico Fermi," typescript, undated
- George J. Spatuzza, "Eulogy to Dr. Enrico Fermi," transcript of speech to the Sons of Italy in America, typescript, undated
- Edoardo Amaldi, "Commemorazione di Enrico Fermi," transcript of speech at the Accademia Nazionale dei Lincei, March 12, 1955, typescript
- Enrico Persico, "Commemorazione di Enrico Fermi," transcript of speech at the University of Pisa, 1955, mimeograph of typescript
- Emilio Segrè, "From Atoms to Antiprotons," typescript
- W. H. Zinn, "The 20th Anniversary of the first chain reaction in Uranium," transcript of a speech delivered at the University of Chicago, December 1, 1962, typescript
- Shawn Meade, "Enrico Fermi: ‘A Peaceful Man,'" typescript, undated

Box 7
Folder 9

Published eulogies, commemorative lectures, and essays, 1954-1955 Giuseppe Bolla, "Per Enrico Fermi," Energia Nucleare 2 (15 December 1954), 69-72

- Edoardo Amaldi, "Ricordo di Enrico Fermi," transcript of Radio Televisione Italiana program, December 28, 1954, typescript
- S. K. Allison, Emilio Segrè, and H. L. Anderson, "Enrico Fermi, 1901-1954," Physics Today 8:1 (January 1955), 9-13
- Francesco Giordani, "Enrico Fermi," reprint from La Chimica e l'Industria 37 (February 1955)
- Pio Sterbini, "Enrico Fermi," Divagando 25 (23 Febuary 1955), 10-13
- Giuseppe Bolla, ""L'Energia Nucleare e L'Italia," published transcript of a lecture delivered on the occasion of the opening of the Politecnico di Milano, March 1955

Box 7

Folder 10

Published eulogies, commemorative lectures, and essays, 1955 P. G. Galli, "L'Importanza Storico-Sociale Di E. Fermi," Vita Sociale 12 (March-April 1955), 126-136

- Franco Rasetti, "Enrico Fermi," reprint, Science 121 (April 1, 1955)
- Herbert L. Anderson, "Meson Experiments with Enrico Fermi," Reprint from Reviews of Modern Physics 27:3 (July 1955)
- Reviews of Modern Physics 27:3 (July 1955), special issue devoted to 1955 Enrico Fermi Memorial Symposium
- "Commemorazione di Enrico Fermi," Supplement to Nuovo Cimento 2 (1955), transcripts of commemorative lectures on Fermi delivered at Varenna on August 6, 1955
- Enrico Persico, "Souvenir de Enrico Fermi," reprint from Scientia 6 (October 1955)
- E. Bretscher and J. D. Cockcroft, "Enrico Fermi, 1901-1954," reprint from Biographical Memoirs of Fellows of the Royal Society 1 (November 1955)

Box 7

Folder 11

Published eulogies, commemorative lectures, and essays, 1955-1957

- N. Metropolis, "Enrico Fermi," Physics Today 8:11 (November 1955), 10-11
- J. H. Van Vleck, "Blurred Borders of Physics and Engineering," reprint from the Journal of Engineering Education 46:4 (December 1955), inscribed to Laura Fermi by the author
- Alberto di Capua, "Enrico Fermi: Arquitecto de la Era Atomica," reprint from Boletín de Informaciones Cientifícas Nacionales 68 (1955), inscribed to Laura Fermi by the author
- Samuel K. Allison, "Enrico Fermi, 1901-1954: A Biographical Memoir," reprint from Biographical Memoirs, Volume 30, New York: Columbia Univ. Press for the National Academy of Sciences, 1957)

Box 7

Folder 12

Published eulogies, commemorative lectures, and essays, 1963-1973 "Celebrazione del Ventisimo Anniversario della Prima Reazione Nucleare a Catena Controllata," Rome: Academia Nazionale dei Lincei, 1963, typescript transcripts of speeches on Fermi and the first controlled nuclear chain reaction

- Franco Rasetti, "Enrico Fermi," Rome: Academia Nazionale dei Lincei, 1968, typescript transcript of a speech delivered at the Academia on April 20, 1968
- S. Chandrasekhar, "Remarks on Enrico Fermi," reprint from J. Mehra, ed., The Physicist's Conception of Nature, Dordrecht, Holland: D. Reidel, 1973
- S. Chandrasekhar, "Remarks on Enrico Fermi," typescript and accompanying correspondence to Laura Fermi

Box 7
Folder 13
Notices of tributes and memorial donations

Box 7
Folder 14
Proposals for scientific research institutions bearing Fermi's name

Box 7
Folder 15
Transcript of speech made on the occasion of the establishment of the site of the first controlled chain reaction as a Chicago Historic Landmark, typescript, with accompanying correspondence from Albert Crewe to Laura Fermi, August 12, 1971

Box 8
Folder 1
Correspondence, programs, and newspaper clippings relating to the dedications of the Enrico Fermi High School in Enfield, CT, and Enrico Fermi School No. 17 in Rochester, NY

Box 8
Folder 2
Correspondence, programs, and newspaper clippings relating to the Enrico Fermi Scholarship Fund

Box 8
Folder 3
Program from the dedication of the Fermi National Accelerator Laboratory; newspaper clipping on the dedication of a marble memorial to Fermi at the University of Pisa; clipping from the Gordon Technical High School newsletter on Laura Fermi's speech at the school's 1974 "Italian Day"

Box 8
Folder 4
Correspondence and Congressional Record entry regarding the edition of an Enrico Fermi commemorative U. S. postage stamp; first edition of the stamp

Box 8
Folder 5
Correspondence relating to, typescript draft of, and 16mm film fragment from, a television program called "The Strange Case of the Cosmic Rays," 1956

Box 8
Folder 6
Typescript draft outline of the film "The World of Enrico Fermi," 1967

Box 8
Folder 7

Correspondence relating to, and typescript draft of, an American Institute of Physics audio-visual program on "The beginnings of Nuclear Energy," 1974

Series II: Correspondence

This series contains correspondence to, from, and about Enrico Fermi, ranging from 1918 to 1963. The materials are mainly of a professional nature, though they do include some letters related to personal and financial matters. In some cases, manuscripts and other pertinent enclosures are also present. The series is divided into two subseries: 1. Personal, and 2. Professional. Other correspondence can be found in: Series I (related to memorials; honors in the form of letters; Fermi correspondence in the Italian State Archives), Series III (related to teaching applications and research fellows; related to consulting contracts obtained while a University of Chicago professor; recommendation letters), Series IV (related to professional organizations), Series V (related to government affairs, including letters to Senators and Representatives about pending legislation and investigations), and Series VI (related to research institutes, councils, and foundations, including the Nobel Prize committee; related to patent claims).

Subseries 1, Personal, is divided into two sub-subseries: 1. Social, and 2. Business and Financial. Correspondence is arranged alphabetically within each sub-subseries.

Subseries 1, Sub-subseries 1, Social, contains social correspondence to, from, and about Fermi, ranging from 1919 to 1954. The bulk of this sub-subseries consists of photocopies of letters that Fermi wrote to Enrico Persico when both were young (1918-1925), including two letters from 1924-1925 that have been published in the last edition of Emilio Segrè's biography of Fermi. Also included are several letters from Fermi's friends and relatives in Italy that were written when communications with Italy were normalized in June 1944; postcards; and a few telegrams and letters concerning Fermi's illness in 1954. Portions of many of the letters in Series 2, Subseries 2, Sub-subseries 1, Professional Correspondence A-Z, are also social in nature.

Subseries 1, Sub-subseries 2, Business and Financial, contains miscellaneous business and financial correspondence to and from Fermi. For business and financial correspondence regarding publications, see Series 2, Subseries 2, Subsubseries 3, Publications. For business and financial correspondence concerning teaching and research, see Series 3, Subseries 1, Business and Financial.

Subseries 2, Professional, includes correspondence to, from, and about Fermi, regarding his professional work. Many of these letters also contain social information, particularly those written to colleagues who were also close friends (e.g. Edoardo Amaldi and Emilio Segrè). The subseries is divided into three sub-subseries: 1. Professional Correspondence A-Z, 2. Conferences, Invitations, and Final Trip to Europe, and 3. Publications

Subseries 2, Sub-subseries 1, Professional Correspondence A-Z, contains the bulk of this collection's professional correspondence to, from, and about Fermi during his lifetime. It is arranged alphabetically. Correspondents of note include Harry S. Truman, Dean Acheson, Charles Lindbergh, Emanuel Bloch (attorney for the Rosenbergs), F. La Guardia, W. Heisenberg, R. P. Feynman, Edward Teller, Max Born, Samuel Allison, Herbert Anderson, H. Urey, and Emilio Segrè. Also included is George Pegram's letter to Admiral S. C. Hooper

outlining the possible use of uranium as an explosive. At the end of the sub-subseries are two files of "crank" letters directed to Fermi.

Subseries 2, Sub-subseries 2, Conferences, Invitations, and Final Trip to Europe, contains correspondence and enclosures relating to conferences, speaking engagements, and dinners to which Fermi was invited, as well as materials relating to his European trip on June 30-September 16, 1954. Invitations are divided into those that Fermi accepted and those that he declined, and materials within each of these divisions are arranged by date. The bulk of the invitations relate to the years 1952-1954. Materials relating to Fermi's last European trip appear at the end of the sub-subseries and are also arranged by date.

Subseries 2, Sub-subseries 3, Publications, contains Fermi's correspondence with various journals and publishers about his own and others' works. It also contains letters pertaining to the posthumous republication of various works by Fermi, including his two-volume Collected Works. General correspondence with journals and publishers is arranged alphabetically by journal or publisher. Correspondence relating to the attempted publication, publication, republication and/or translation of books by Fermi is filed separately, divided alphabetically by the name of the book, and arranged within each of these divisions by date.

Subseries 1: Personal

Sub-subseries 1: Social

Box 9
Folder 1
A-Pa
- Allison, Samuel K.
- Amaldi, Edoardo and Ginestra
- Bernardini, Gilberto
- Born, Max
- Caldwell-Planck, Miriam
- Cercutti, C.
- Fermi, Laura (Fermi's wife)
- Fermi, Maria (Fermi's sister)
- Homburg, Olga (Fermi's aunt)
- Homburg, Roberto A. (Fermi's uncle)
- Padoa, Emanuele

Box 9
Folder 2
Persico, Enrico
- Correspondence between Enrico Fermi, Laura Fermi, and Enrico Persico

Box 9
Folder 3
Q-Z
- Rossi, Bruno to Samuel Allison
- Segrè, Angelo

Sub-subseries 2: Business and Financial

Box 9
Folder 4
A-B
- Alien Registration Service
- American Philosophical Society
- American Telephone & Telegraph
- Bankers Trust Company
- Benedetti, Sergio
- Board of Election Commissioners

Box 9
Folder 5
C-D
- Chase National Bank
- Cloutier, Edmund
- Columbia University Club of Chicago
- Columbia University Office of the Treasurer
- Connecticut Fire Insurance Company
- Consumers Power Co.
- Cooper-Cole, Fay
- Daly, W. A.
- De Blasio, Maria
- Dinsmoor, William
- Draft Board #13
- Drexel Chevrolet Co.
- DuPont Co.

Box 9
Folder 6
E-F
- Eastman Kodak Co.
- Fermi, Laura
- Ferrall, Victor
- Freehafer, Charles

Box 9
Folder 7
G-H
- Giannini, Gabriel
- Giorgi, Giorgio
- Graham, Edward K.
- Hammond, Philo F.
- H. Hentz & Co.
- Hess, V. H.
- Hogan, John V. L.
- Hubbel, S. W.

Box 9

Folder 8

I-L

- Income Tax Bureau
- Johnson, Roy H.
- Kemble, Edwin C.
- Knox
- Liberty Mutual Insurance
- Lincoln Rochester Trust Co.
- Local Board No. 13

Box 9

Folder 9

M-R

- Manlio, Mando
- Metcalf, Colonel
- New York State Tax Commission
- Pegram, George B.
- Rasetti, Franco
- Registration of Rented Dwellings
- Rossi, Bruno

Box 9

Folder 10

S-T

- Schumann, Alfred
- Scudder, Stevens, & Clark Fund
- Sears, Roebuck, & Co.
- Secretary of State, Illinois
- Segrè, Emilio
- Stein, Sidney
- Swenson, Hjordis

Box 9

Folder 11

U-Z, and unidentified signatures

- University of California, Office of Faculty Salaries
- University of Chicago Metallurgical Laboratory
- University National Bank
- University State Bank
- Urey, H. C.
- Webb, Harold
- Unidentified signatures

Subseries 2: Professional

Sub-subseries 1: Professional Correspondence A-Z

Box 9

Folder 12

A-Al

- Abbot, Thomas A.
- Accademia Nazionale Dei Lincei
- Acheson, Dean G.
- Affinati, Giuseppe
- Agnew, Harold
- Ahrens, George
- Albert, A. A.
- Alcide de Gasperi, S. E.
- Aletti, Giorgi
- Alfvén, H.
- Allen, J. F.
- Allison, Samuel and Edward Teller to Time

Box 9
Folder 13

Amaldi, Edoardo

- Amaldi, Ginestra

Box 9
Folder 14

Ame-Az

- American College of Physicians
- American Institute of Physics
- American Astronomical Society
- American Scandinavian Foundation
- Anderson, Carl
- Anderson, Herbert L.
- Anzo, Yasuke

Box 9
Folder 14

Ame-Az

- Arctander, Erik H.
- Arias, Nello
- Armour Research Foundation
- Ascoli, Max
- Asunde, R. K.
- Auger, P.
- Avanzi, Enrico

Box 9
Folder 15

B-Bg

- Bacher, Robert (see also Bernard, Lawrence J.)
- Barkas, Walter H.
- Battig, Augusto J. M.
- Beck, Guido
- Begle, E. G.
- Bernard, Lawrence J. (see also Bacher, Robert)
- Bernardini, G.

- Best, James M.
- Bethe, Hans A.

Box 9

Folder 16

Bh-Bn

- Bhabha, H.
- Bichara, Ing. M.
- Bidelman, William P.
- Blaisdell, Warren
- Bloch, Emanuel H.
- Bloomenthal, Ernest D.

Box 9

Folder 17

Bo-Bz

- Bolster, Admiral C. M.
- Borden, William
- Borigiolo, A.
- Born, Max
- Boschke
- Bowdoin College
- Bradbury, N. E.
- Breit, Greogory
- Brooks, Harvey, et al
- Brown, Regina
- Brueckner, K. A.
- Bundesen, Herman N.
- Busto Garolfo, C
- Byrnes, James F.

Box 9

Folder 18

C-Ca

- Caccia, P.
- Camac, M.
- Canterbury, W. M.
- Cardillo, Frances
- Carnegie Institution
- Carrick, Lynn
- Casali, Ing. Giuseppe
- Case Institute of Technology
- Caselli, Aldo
- Cassinio, G.
- Castelnuovo, Guido

Box 9

Folder 19

Cb-Ci

- Chamberlain, Owen

- Chandrasekhar, S.
- Chaudhury, P. K. Sen
- Chew, Geoffrey
- Cisler, Walker L.

Box 9
Folder 20

Cj-Cz

- Cleveland, Forrest F.
- Cocconi, Giuseppe
- Collins, George
- Columbia University
- Compton, Arthur
- Cooper, E. B.
- Corbin, Jr., Harold H.
- Cornell University
- Cowan, Jr., Clyde
- Crawford, Fredrick C.
- Crescenzi, Giuseppe
- Cunningham
- Cuneg, G. B.
- Cyrus B. Comstock Fund

Box 9
Folder 21

D-Da

- Dadrian, Vahakn
- Daniels, Farrington
- Daponte, Antoine
- Darrow, Karl K.
- Davidson, Carter
- Davies, J. D. Griffith
- Davis, Jr., Leverett
- Davis, Warren M.
- Dawson, Laurence
- Day, Edmund E.

Box 9
Folder 22

Db-Dz

- De Bellis, Giuseppe
- De Bernart, Enzo
- De Broglie, Prince Louis
- DeMos, C. Frederick
- Deutsch, Martin
- Deveali, Mario L.
- Diamond, Edward
- Dickson, John
- Dobzhansky

- Domenico, Scavino
- Donohue, Maurice F. X.
- Drell, S. D.
- Durning, Harry M. (see U.S. Office of the Collector of Customs)
- Dutta, A. K.

Box 9

Folder 23

E

- Ecker, Allan B.
- Eckert, W. J.
- Eddy, Guy G.
- Eisenhower, Dwight D.
- Ellickson, Raymond T.
- Elmhurst College
- Emiliiani, Cesare
- Ensanian, Minas
- Ewald, P. P.

Box 9

Folder 24

F-Fex

- Fabbrica Italiana Magneti Marelli
- Failla, G.
- Fallico, Arturo B.
- Fano, U.
- Feld, Bernard
- Ferretti, B.

Box 9

Folder 25

Feynman, R. P.

Box 10

Folder 1

Ff-Fz

- Fields, K. E.
- Fermini, James A.
- Finkelstein, Louis
- Fireman, E. L.
- Fitzgerald, Albert
- Flanders, Donald A.
- Fong, P. K.
- Fornari, Francesco
- Forte, Felix
- Forti, Umberto
- Freehafer, C. A.
- Frenkiel, F. N.
- Fukuda, Hiroshi
- Furz, Anna

Box 10
Folder 2
G-Gi
- Gaetano, Spinelli
- Gamov, George
- Garwin, R. L.
- General Electric
- Gentner, W.
- George, E. P.
- Giannini, Gabriel M.
- Gibbs, R. C.
- Giordani, Francesco

Box 10
Folder 3
Gj-Go
- Gold, T.
- Goldhaber, Gerson
- Goldhaber, Maurice
- Goldschmidt, Berliand
- Goudsmit, S. A.

Box 10
Folder 4
Gp-Gz
- Greenewalt, C. H.
- Grimshaw, William H.
- Grosse, A. V.
- Guarco, Anthony

Box 10
Folder 5
H-Hea
- Haber-Schaim, Uri
- Halban, Hans
- Hall, Jean
- Hall, Lloyd A.
- Handsfeld, Hugh W.
- Hara, Katsu
- Harkins

Box 10
Folder 5
H-Hea
- Harper, Paul V.
- Harrell, W. B.
- Hartman, Hans
- Harvard University
- Haverford College
- Heathcote, N. H. de V.

Box 10
Folder 6
Heisenberg, W.
Box 10
Folder 7
Hej-Hof
- HELU
- Hemens, Rollin D.
- Hevesy, G.
- Higinbotham, W. A., et al
- Helsep, Charter
- Hinton, Joan
- Hoffman, Frederic

Box 10
Folder 8
Hog-Hz
- Holland, Kenneth
- Holloway, John T.
- Hough, E. W.
- Howard, J. H.
- Howland, Arthur L.
- Hubscher, Leonard
- Hurley, Roy T.
- Hutchins, Robert M.
- Hutchinson, William S.

Box 10
Folder 9
I-J
- Ibert, Jean-Claude
- Ireton, H. J. C.
- Indirizzo, H.
- Iskraut, Richard W.
- Italian Historical Society of America
- Ivaldi
- Jewett, Frank B.
- Joliot-Curie, F.
- Johnson, H. McClure
- Judd, David L.

Box 10
Folder 10
K
- Kerst, D. W.
- Kimpton, Lawrence A.
- Kingdon, K. H.
- Kirkpatrick, John I.
- Kistiakowsky, G. B.

- Klose, Wolfgang
- Kobayasi, M.
- Kocher, Larry
- Kogan, Zuce
- Korff, Serge A.
- Kotani, Masao
- Koza, Frank
- Kraushaar, William L.
- Krebs, A. T.
- Kruse, Ulrich E.
- Kupperman, A.

Box 10

Folder 11

L-Ln

- La Guardia, F. H.
- Lark-Horovitz, Karl
- Laurence, William L.
- Lemon, Harvey B.
- Lepore, Joseph V.
- Leprince-Ringuet, L.
- Lehman, Charles A.
- Lewis, Harold W.
- Libby, W. F.
- Liddel, Urner
- Lindbergh, Charles A.
- Lippman, Lawrence
- Little, R. N.

Box 10

Folder 12

Lo-Lz

- Lord, J. J.
- Loomis, F. W.
- Los Alamos University
- Lucini, Lucio
- Lunn, Gene
- Luntz, Jerome D.
- Lyman, A. L.

Box 10

Folder 13

M-Mac

- Ma, Helen Kolthoff (Lin)
- McCusker, C. B. A.
- McDaniel, B. D.
- McDonald, William F.
- MacGregor, Frank S.
- McKellar, Andrew

- McMillan, Edwin M.

Box 10
Folder 14

Maj-Maq

- Majorana, Quirino
- Malenka, Bertram J.
- Manley, J. H.

Box 10
Folder 15

Mar-Metro

- March, Arthur
- March, Stanley R.
- Marchant, Guy B.
- Mark, Carson
- Mark, Herman F.
- Marshak, R. E.
- Marshall, Leona
- Martin, Ronald
- Mason, James R.
- Mayer, Rollins H.
- Meagher, R. E.
- Metro Goldwyn Mayer (see also J. J. Nickson; Wensel, H. T.)

Box 10
Folder 16

Metropolis, Nicholas

Box 10
Folder 17

Metroq-My

- Miller, E. C.
- Moe, Henry Allen
- Monelli, Paolo
- Montel, Albert
- Morandi, Luigi
- Morghen, Raffaello
- Mott, N. F.
- Mount Holyoke College
- Moyer, Burton J.
- Mrosowksi
- Mulliken, Robert S.
- Myers, Henry

Box 11
Folder 1

N

- National Academy of Sciences
- National Research Council (von Neumann)
- National Science Foundation

- Neilly, Jr., Andrew H.
- Nickson, J. J. (see also Metro Goldwyn Mayer; Wensel, H. T.)
- Nicoletti, Angelo
- Nielson, Harald H.
- Nissim, Renzo
- Noyes, H. P.

Box 11

Folder 2

O

- Oehme, Reinhard
- Oncken, Mildred
- O'Neill, John J.
- Onelli, Onello
- Ore, Aadne
- Orear, Jay
- Osgood, Thomas H.
- Ottolenghi, Marinella

Box 11

Folder 3

P-Pa

- Pagliai, Armando
- Palmer, Dwight R. G.
- Palser, Barbara
- Panofsky, Wolfgang
- Parravano, Giuseppe
- Pasternack, S.
- Pathé, Charles
- Pauling, Linus

Box 11

Folder 4

Pegram, George B. to Admiral S. C. Hooper, outlining the possibility that "uranium might be used as an explosive," March 16, 1939

Box 11

Folder 5

Peh-Pi

- Peierls, R. E.
- Perl, William
- Peterson, A. V.
- Petterson, Hans
- Physics Today
- Piccioni, Oreste
- Picone, M.
- Pinazza, Isidoro
- Pincherle, Leo
- Pittere, Angelo Michele

Box 11

Folder 6

Pj-Polu

- Platt, Joseph B.
- Polanyi, Tomaso and Michele
- Politi, Vittorio
- Pollara, Luigi Z.
- Polowsky, Joseph P.

Box 11

Folder 7

Polv-Pz

- Polvani, Giovanni
- Poretti, Guelfo G.
- Principia College of Liberal Arts
- Probst, George E.
- Puppi, Gianni

Box 11

Folder 8

Q-Ror

- Racah, G.
- Radio Corporation of America (RCA)
- Ramsey, Norman
- Rapier, Pascal M.
- Redaelli, Giuseppe
- Regener, Victor H.
- Reglin, Miro
- Reines, Frederick
- Ries, Harold C.
- Robertson, Martin L.
- Rogers, Marvin C.
- Rollefson, R.
- Román, A.

Box 11

Folder 9

Rossi, Bruno (see also Volpi, Leopoldo Giulio)

Box 11

Folder 10

Rot-Rz

- Rubius, Jack L.
- Russell, Francis H.
- Rutgers, A. J.

Box 11

Folder 11

S-Sak

- Sachs, Mary Koues
- Sachs, R. G.
- Sadony, Joseph A.

Box 11
Folder 12
Sal-Sef
- Salcedo, José
- Salant, Edward O.
- Salvadori, Mario G.
- Salzano, Carlo de Farrariis
- Schein, Marcel
- Schiff, L. I.
- Schrodinger, E.
- Scorsone, Francesco Giulio
- Seeger, Raymond J.

Box 11
Folder 13
Segrè, Emilio

Box 11
Folder 14
Seh-Sk
- Sereni, Angelo Fiero
- Shankland, R. S.
- Shapley, Harlow
- Shockley, W.
- Shutt, R. P.
- Singer, S. Fred
- Sirkar, S. C.

Box 11
Folder 15
Sl-Sph
- Slater, John C.
- Sloan, Howard
- Sloan, LeRoy H.
- Smith, Cyril Stanley
- Smith, Gordon
- Smith, Vincent E.
- Spatuzza, George J.

Box 11
Folder 16
Spi-Sz
- Spitzer, Jr., Lyman
- Stearns, Joyce
- Steelman, John R.
- Strand, K. A.
- Strauss, Lewis L.
- Sulmonetti, Alfred T.
- Svirkova, Ludmila
- Switz, Theodore M.

- Synge, John L.

Box 11

Folder 17

Szilard, Leo, photocopy of correspondence between Szilard and

- Fermi in July 1939 concerning the early steps that eventually led to the first chain reaction

Box 11

Folder 18

T-Te

- Tangorra, Ingegner Giorgio
- Tarchiani, Alberto
- Tavora, Elysiario
- Teller, Edward (see also Allison, Samuel)

Box 11

Folder 19

Truman, Harry S. to Enrico Fermi, on the occasion of the expiration of the latter's term on the General Advisory Committeee to the Atomic Energy Commission, August 11, 1950

Box 11

Folder 20

Tf-Tri

- Thibaud, M. J.
- Thorndike, Alan
- Tigay, Samuel
- Tobey, A. R.
- Trabacchi, G. C.
- Tricomi, F.
- Tumbleson, Robert
- Turano, Luigi

Box 11

Folder 21

U

- Uehling, Edwin A.
- Ulam, Stanley M.
- U. S. Department of Labor, Immigration and Naturalization Service
- U. S. Department of Justice, Immigration and Naturalization Service
- U. S. Information Agency
- U. S. Office of the Collector of Customs, asking permission to meet Niels Bohr at the pier when he arrives in New York City, January 1939
- University of California
- University of Chicago
- University of Illinois
- University of Rochester
- Urey, H. C.

Box 11

Folder 22

V

- Vandenberg
- Volpi, Leopoldo Giulio
- Von Kleist, H. R.
- Von Laue, Max
- Von Totreich, Wolfgang R.
- Vrito, Fabricio
- Voorhees, H. R.

Box 11

Folder 23

W-Wd

- Walker, Robert
- Wallace, Robert A.
- Wallis, Allen W.
- Walsh, L. Luis
- Watson, Kenneth M.
- Watson, W. W.
- Wattenberg, Al

Box 11

Folder 24

We-Wif

- Webb, Harold W.
- Weil, George
- Weisskopf, Victor F.
- Wensel, H. T. (see also Metro Goldwyn Mayer; Nickson, J. J.)
- Wessel, Paul
- Wetmore, Alexander
- Wheaton College
- Wick, G. C.

Box 11

Folder 25

Wig-X

- Wigner, Eugene P.
- Williams, Lynn A.
- Wilson, R. R.
- Wolf, Donald D.
- Wolf, Karl
- Worthington, Hood

Box 12

Folder 1

Y

- Yale University
- Yang, C. N. "Frank"
- Yasaki, Tameichi
- Yeivin, Yehudah
- Young, Gale

- Young, Hoylande
- Yudowitch, K. L.
- Yust, Walter

Box 12
Folder 2

Z

- Zachiariasen, W. H.
- Zaffarano, D. J.
- Zingaro, William
- Zinn, W. H.
- Zoysa, D. E. K.
- Zweifel, Paul F.
- Zworykin, V. K.

Box 12
Folder 3

Unidentified, four letters

Box 12
Folder 4

Crank letters, consists of letters to and from amateur physicists who want Fermi to verify their theories about matter and the universe

Box 12
Folder 5

Crank letters, consists of letters to and from various individuals who wish either to work with Fermi, to share various concerns with him, or to obtain various kinds of information from him

Sub-subseries 2: Conferences, Paid Lectures, and Final Trip to Europe

Box 12
Folder 6

Accepted invitations to professional conferences, lecture series, and dinners, 1939-1947

- Eighth Council of Physics-Solvay, Université Libre de Bruxelles, Brusselles, October 22-29, 1939
- MacInnes Conference, June 1947

Box 12
Folder 7

Accepted invitations to professional conferences, lecture series, and dinners, 1948-1949

- Pocono Conference, National Academy of Sciences, Pocono Manor, PA, April 1948
- Ram Island Conference, National Academy of Sciences, Ram Island, NJ, March 3-A./pril 3, 1948
- History of Science Lecture Series, The University of Chicago, Chicago, IL, August 16, 1949
- Conference on Atomic Physics, Academia Nazionale dei Lincei, Rome, 1949

Box 12
Folder 8

Accepted invitations to professional conferences, lecture series, and dinners, 1952

- Lecture, Innominate Club, Chicago, IL, October 6, 1952

- Physics colloquium, The University of Wisconsin, Madison, WI, October 31, 1952
- Third Annual Conference on Nuclear Physics, University of Rochester, NY, Rochester, NY, December 18, 1952

Box 12
Folder 9

Accepted invitations to professional conferences, lecture series, and dinners, 1953

- Russell Lecture, American Astronomical Society, Boulder, CO, January 13, 1953
- Luncheon to welcome Professor Samuel Sambursky, The American Friends of the Hebrew University, Chicago, IL, February 25, 1953
- Colloquium, Los Alamos Scientific Laboratory, Los Alamos, NM, August 11, 1953

Box 12
Folder 10

Accepted invitations to professional conferences, lecture series, and dinners, 1953

- International Conference on Theoretical Physics, Kyoto and Tokyo, September 15-23, 1953 (Fermi did not attend this conference)

Box 12
Folder 11

Accepted invitations to professional conferences, lecture series, and dinners, 1953-1954

- Lecture, Haverford College, Haverford, PA, November 17-18, 1953
- Columbus Day Eve Dinner, Italian-American Charitable Society, Boston, MA, October 11, 1954

Box 12
Folder 12

Declined invitations to professional conferences, lecture series, and dinners, October - December 1953

Box 12
Folder 13

Declined invitations to professional conferences, lecture series, and dinners, January - February 1954

Box 12
Folder 14

Declined invitations to professional conferences, lecture series, and dinners, March - April 1954

Box 12
Folder 15

Declined invitations to professional conferences, lecture series, and dinners, May 1954

Box 12
Folder 16

Declined invitations to professional conferences, lecture series, and dinners, September 1954

Box 12
Folder 17

Declined invitations to professional conferences, lecture series, and dinners, October 1954

Box 12
Folder 18

Declined invitations to professional conferences, lecture series, and dinners, November 1954

Box 12

Folder 19

Correspondence relating to Fermi's summer trip to Europe in 1954, by date, September 23, 1953 - August 27, 1954, correspondents

- Amaldi, Edoardo
- Brown, Regina
- Collier, George
- Committee on International Exchange of Persons
- Curran, Joseph
- Detoeuf, J. F.
- DeWitt, Cécile (Morette)
- Fox, George F.
- Frajese, A.
- Giordani, Francesco
- Marshak, R. E.
- Patterson, R. A.
- Polvani, Giovanni
- Puppi, Gianni
- Rossi, Bruno
- Swart, L. R.
- Williams, F. H.
- Young, Francis A.
- Zusser,

Box 12

Folder 20

Complimentary book of Italian rail passes for Fermi's 1954 summer trip to Europe, with accompanying letter from Raffaello Morghen, Chancellor, Accademia Nazionale dei Lincei, December 17, 1953

Sub-subseries 3: Publications

Box 12

Folder 21

General correspondence with publishers, A

- Academic Press
- American Association of Physics Teachers (American J of Physics)
- American Institute of Physics (Physical Review)
- Astrophysical Journal

Box 12

Folder 22

General correspondence with publishers, B-L

- Butterworth's Scientific Publications
- W. H. Freeman
- Hafner Publishing

Box 12

Folder 23

General correspondence with publishers, M-P

- McGraw-Hill
- Prentice-Hall (see also Box 13, Folders 5-6)

Box 12

Folder 24

General correspondence with publishers, Q-Z

- Società Italiana di Fisica
- Friedr. Vieweg & Sohn
- John Wiley & Sons (see also Box 13, Folder 4)

Box 12

Folder 25

Correspondence initiating the publication of Fermi's Collected Papers, published in two volumes in 1962-1965 by the University of Chicago Press and the Accademia Nazionale dei Lincei Press, by date, December 21, 1954 - April 4, 1955

Box 12

Folder 26

Correspondence regarding the attempted exclusion of Fermi's lecture notes on "Quantum Mechanics" from his Collected Papers, pursuant to an attempt by McGraw-Hill Book Company to publish those notes, by date, December 9, 1959 - February 29, 1960

Box 12

Folder 27

Correspondence between Laura Fermi, Emilio Segrè, Ernesto Gianni, Al Wattenberg, and Herbert L. Anderson relating to the preparation of Fermi's Collected Papers, by date, January 24, 1960 - July 15, 1963

Box 12

Folder 28

Letter from Iriah Jefferson to Emilio Segrè announcing the second printing of Fermi's Collected Papers, Vol. II, March 24, 1966

Box 13

Folder 1

Correspondence relating to the publication and foreign translations of Fermi's Elementary Particles, published in 1951 by Yale University Press, by date, November 8, 1957 - March 18, 1969

Box 13

Folder 2

Correspondence relating to the attempted translation and revision of Fermi's Fisica for use in American high schools by Enrico Fermi and Warren M. Davis for the Macmillan Company, by date, November 29, 1946 - November 10, 1952

Box 13

Folder 3

Correspondence related to the 1965 English translation and publication of Fermi's Molecules and Crystals (originally published 1934, M. Zanichelli) by W. A. Benjamin, Inc., by date, June 5, 1962 - June 14, 1965

Box 13

Folder 4

Correspondence relating to the publication and foreign translations of Nuclear Physics, a course of lectures given by Enrico Fermi and compiled by Jay Orear, A. H. Rosenfeld, and R. A. Schluter, and published in offset by the University of Chicago Press, by date, December 1, 1949 - July 13, 1955

Box 13

Folder 5

Correspondence relating to the publication of Fermi's Thermodynamics, published by Prentice-Hall in 1937, by date, August 14, 1936 - April 27, 1949

Box 13

Folder 6

Correspondence relating to the republication and foreign translations of Fermi's Thermodynamics, published in 1956 by Dover, by date, December 21, 1955 - August 25, 1976

Box 13

Folder 7

Requests to republish various articles by Fermi, by date, October 26, 1962 - April 25, 1969

Series III: Academic Papers

Series III, Academic Papers, contains administrative and financial records, as well as miscellaneous papers connected with Fermi's work as a faculty member in various Italian and American universities. The bulk of the materials date from his work at the University of Chicago between 1945 and 1954. The series is divided into four subseries: 1. Business and Financial, 2. Department and Colleagues, 3. Examinations and Courses, and 4. Recommendations.

Subseries 1, Business and Financial, contains correspondence and records certifying Fermi's appointment to the faculty at various universities, and business and financial records pursuant to his work as a faculty member at the University of Chicago. These latter materials include earnings reports, and correspondence and documents regarding consulting contracts undertaken as a University of Chicago faculty member.

Subseries 2, Department and Colleagues, contains materials relating to the daily life of the University of Chicago Department of Physics during Fermi's tenure there. These materials include memoranda, agendas and minutes for staff meetings, lists of teaching and advising assignments, and employment application letters. The subseries also contains papers outlining the work of colleagues, including curricula vitae, bibliographies of publications, and lists of current research projects. Of particular interest is a 1950 memorandum from Dean Walter Bartky and Cyril Stanley Smith to the Physical Sciences Division reexamining the University of Chicago's policy on doing defense research.

Subseries 3, Examinations and Courses, includes student examinations and answer keys, course outlines, class lists, and grade sheets. For Fermi's notes for specific courses, see Series VII, Notebooks, Subseries 2.

Subseries 4, Recommendations, contains recommendation letters that Fermi wrote for students and colleagues. The subseries is arranged alphabetically by the subject of the recommendation.

Subseries 1: Business and Financial

Box 13
Folder 8
Certificates confirming Fermi's appointments to the faculties of various Italian universities, 1922-1927
Box 13
Folder 9
Correspondence concerning Fermi's appointment to the position of Charles H. Swift Distinguished Service Professor of Physics at the University of Chicago, by date, May 27, 1944 - November 26, 1946
Box 13
Folder 10
Correspondence concerning pay raises as a University of Chicago faculty member, by date, May 28, 1948 - May 15, 1951
Box 13
Folder 11
Consultant agreements and correspondence, University of Chicago Carbide and Chemicals Corporation subcontract No. 77 under W7405 eng26, by date, June 30, 1949 - July 23, 1953
Box 13
Folder 12
Consultant agreements and correspondence, University of Chicago University of California-Los Alamos Scientific Laboratory Prime Contract W7405 eng. 36, Project Y, by date, June 23, 1947 - July 28, 1947
Box 13
Folder 13
Consultant agreements and correspondence, University of Chicago Monsanto Chemical Company, Subcontract No. 53 of Prime Contract No. W35058 eng71, by date, June 26, 1947 - December 5, 1947
Box 13
Folder 14
Reports of and correspondence concerning outside earnings, with accompanying documents relating to 4E faculty contract regulations, University of Chicago, by date, December 1, 1949 - May 22, 1953 (see also Box 15, Folders 12-13)

Subseries 2: Department and Colleagues

Box 13
Folder 15
Miscellaneous intradepartmental memoranda, faculty teaching assignments, and staff meeting agendas and minutes, Department of Physics, University of Chicago, by date, January 26, 1949 - January 30, 1952
Box 13
Folder 16
Graduate student registers with faculty advising assignments, Department of Physics, University of Chicago, by date, 1949 - 1953

Box 13
Folder 17
"Proposed List of Courses of Instruction," Department of Physics, University of Chicago, typescript, undated
- "Proposed Outline of Curriculum and of Requirements for Degrees," Department of Physics, University of Chicago, typescript, undated

Box 13
Folder 18
"Information for Physics Students," Department of Physics, University of Chicago, typescript, June 30, 1948
- "Thesis and Oral Exam Procedures," Department of Physics, University of Chicago, typescript, June 25, 1953
- "To Post-Basic Students, Re: (1) Advisory Committee, (2) Form ofThesis," Department of Physics, University of Chicago, typescript, undated

Box 13
Folder 19
Application letters for teaching positions, A-Z by applicant
- Crivello, Mario
- De Witt, Bryce Seligman
- Garrido, Louis A.
- Heidmann, J.

Box 13
Folder 20
Correspondence and memoranda about advising students and sponsoring research fellows, A-Z by student or research fellow
- Bloom, Stuart
- Fujii, T. A.
- Goebel, Charles J.
- Kulsrud, Russell
- Murphy, Paul G.
- Rosenfeld, Arthur
- Slater, William E.

Box 13
Folder 21
Bibliographies of Department of Physics faculty, Univ. of Chicago, A-Z
- Adams, II, E. N.
- Creutz, Edward Chester
- Garrison, John B.
- Garwin, Richard L.
- Goldberger, Marvin L.
- Hildebrand, Roger
- Inghram, Mark G.
- Isenberg, I.
- Marshall, John
- Matthias, Bernd T.
- Nagle, Darragh E.

- Oppenheimer, Frank
- Parzen, George
- Platt, J. R.
- Roothaan, C. C. J.
- Telegdi, V. L.
- Tuck, James L.
- Wert, Charles

Box 13

Folder 22

Curricula vitae of European physicists, A-Z

- Ekstein, Hans
- Lolli, Ettore
- Luzzatti, Luigi
- Pirani, Roberto
- Pontecorvo, Bruno
- Rona, Elisabeth
- Sciarini, Louis
- Supino, Giulio

Box 13

Folder 23

Reports and notations of experimental work being carried out in the University of Chicago Department of Physics, A-Z, by experimenter, plus unidentifiable

- "Art"
- Orear, Jay
- Rosenfeld
- Van Hove
- Yodh

Box 13

Folder 24

"Thoughts on the Place of the University in 'Defense' Research," memorandum from Dean Walter Bartky and Cyril Stanley Smith to the Physical Sciences Division, University of Chicago, December 4, 1950

Box 13

Folder 25

Miscellaneous memoranda to Warren C. Johnson of the Department of Chemistry, University of Chicago, by date, December 21, 1950 - March 26, 1952

Subseries 3: Examinations and Courses

Box 14

Folder 1

Memoranda announcing PhD Qualifying Examination Results, Department of Physics, University of Chicago, by date, December 14, 1948 - June 11, 1954

Box 14

Folder 2

PhD Basic Examination grade charts and grading notation keys,

- Department of Physics, University of Chicago, by date, November 11 - December 3, 1948, some undated

Box 14
Folder 3
PhD Basic Examinations, Department of Physics, University of Chicago, some worked, with corrections

Box 14
Folder 4
Official and unofficial class lists, grade charts, and add/drop forms, University of Chicago, by date, Summer 1949 - Winter 1954

Box 14
Folder 5
Course outlines and syllabi, Department of Physics, University of Chicago, by date and course number, Autumn 1947 - Autumn 1949

Box 14
Folder 6
Course outlines and syllabi, Department of Physics, University of Chicago, by date and course number, Winter 1950 - Spring 1953

Box 14
Folder 7
Course outlines and syllabi, Department of Physics, University of Chicago, by course number, undated

Box 14
Folder 8
Course outlines and syllabi, Department of Physics, University of Chicago, unnumbered, undated

Box 14
Folder 9
Physics 342 Examination, Department Of Physics, University of Chicago, MS draft, mimeograph master, mimeograph copy, May 21, 1954

Box 14
Folder 10
Examination, untitled, mimeograph copy, October 25

Box 14
Folder 11
Examination, untitled, mimeograph copy, undated

Box 14
Folder 12
Problem set with answers, Nuclear Physics I, undated
- Selected answers to Physics 352 problem set, MS, undated

Subseries 4: Recommendations

Box 14
Folder 13
A-B
- Amaldi, Edoardo

- Adams, Edward N.
- Baer, Ferdinand
- Bernardini, Gilberto
- Bloom, Stewart

Box 14
Folder 14

C-G

- Chamberlain, Owen
- Chew, Geoffrey
- Fong, Ping-kwan
- Garwin, Richard Lawrence
- Gell-Mann, Murray
- Goldberger, Marvin L.

Box 14
Folder 15

H-K

- Haber-Schaim, U.
- Heinrich, John T.
- Hinman, George
- Hinton, Joan
- Kanner, H.
- Kaufman, Allan Nathan
- Kirnbauer, Angela Rose

Box 14
Folder 16

L-O

- Lee, T. D.
- Marshall, Leona
- Moszkowski
- Miller, George
- Mulliken, Robert S.
- Nagle, Darragh
- Oppenheimer, Frank
- Orear, Jay

Box 14
Folder 17

P-R

- Parzen, George
- Pauli, Wolfgang
- Purcell, Edward
- Rasetti, Franco
- Roberts, Arthur

Box 14
Folder 18

S

- Schluter, Robert

- Segrè, Emilio
- Serber, Robert
- Seren, Leo
- Silverstein, Elliot
- Slater, William
- Solmitz, Frank
- Steinberger, Jack
- Swanson, Robert

Box 14

Folder 19

T-Z

- Telegdi, Valentine
- Teng, Lee Chang-li
- Tuck, James
- Wattenberg, Al
- Wick, G. C.
- Wright, S. C.
- Young, Hoylande
- Zachariasen, Fredrik

Box 14

Folder 20

Recommendations for two or more individuals at once

- Kruse, Ulrich; Deser, Stanley; Martin, P.; Fulton, Thomas; Raphael, R.
- Glicksman, Maurice; Schluter, R.; Yodh, Guarang; and Stadler, Henry

Series IV: Professional Organizations

Series IV, Professional Organizations, contains correspondence and other materials relating to Fermi's professional involvement in the American Institute of Physics and the American Physical Society (APS) between 1947 and 1954. Most of the materials relate to the APS, and they include his correspondence with its staff and members, minutes and programs from meetings, and press releases. Correspondence is categorized by the meeting or topic to which it applies and then arranged by date within each category. For correspondence with APS members over the Astin case, see Series V, Federal Government.

Box 14

Folder 21

American Institute of Physics, Director's Report for 1951 and accompanying correspondence from Henry Barton

- AIP National Register of Scientific and Technical Personnel form for Enrico Fermi

Box 14

Folder 22

American Physical Society, general correspondence, by date, May 20, 1947 - October 7, 1954, correspondents

- Anzo, Y.
- Barton, Henry to John Slater
- Bethe, H. A.

- Darrow, Karl K.
- Oldenberg, O.
- Osgood, Thomas
- Pegram, George
- Sears, F. W.
- Shrum, G. M.
- Slater, John
- Webb, William
- Wheeler, John A.
- Zemansky, M. W.

Box 14

Folder 23

American Physical Society, correspondence and notes concerning committee and councilor action, by date, November 21, 1952 - May 5, 1953, correspondents

- Barton, H. A.
- Behnke, John A. to G. P. Harnwell
- Behnke, John A. to Karl K. Darrow
- Behnke, John A. to M. A. Tuve
- Darrow, Karl K.
- Darrow, Karl K. to J. C. Slater, Harvey Brooks, S. A. Goudsmit, F. W.
- Darrow, Karl K. to J. H. Van Vleck, F. Seitz, and H. A. Bethe
- Loomis, G. B. Pegram, and L. I. Schiff
- Rojansky, V.
- Van Vleck, J. H.
- Notes in manuscript about committee appointments, undated
- Notes in typescript about committee appointments, undated

Box 14

Folder 24

American Physical Society, correspondence concerning Denver meeting on June 30 to July 3, 1952, by date, April 7, 1952 - June 30, 1952, correspondents

- Cohn, Byron E.
- Hazen, Wayne
- Housing Chairman, APS
- K. Greisen, W. E. Hazon, H. V. Neher, E. P. Ney, E. Teller, M. S.
- Neher, Vallarta, and J. A. Wheeler
- Vallarta, Manuel
- Van Vleck, J. H.
- Wheeler, John A.

Box 15

Folder 1

American Physical Society, correspondence concerning St. Louis meeting on November 28, 1952, by date, June 23, 1952 - December 1, 1952, correspondents

- Bacher, Robert F. to J. H. Van Vleck
- Beams, J. W. to J. H. Van Vleck
- Bethe, H. A. to J. H. Van Vleck
- Compton, Arthur H.

- Compton, Arthur H. to J. H. Van Vleck
- Darrow, Karl K.
- Darrow, Karl K. to Arthur H. Compton
- Darrow, Karl K. to E. P. Wigner, W. H. Zinn, and T. H. Johnson
- Darrow, Karl K. to Victor F. Weisskopf
- DuBridge, L. A. to J. H. Van Vleck
- Pegram, George B.
- Reservation Manager, Chase Hotel
- Swann, W. F. G. to J. H. Van Vleck
- Weisskopf, Victor F.

Box 15

Folder 2

American Physical Society, correspondence concerning Cambridge, MA, meeting on January 21, 1953, by date, November 25, 1952 - January 19, 1953, correspondents

- Darrow, Karl K.
- Van Vleck, J. H.
- United Airlines flight coupon for Enrico Fermi, Chicago Midway to Boston, January 21, 1953

Box 15

Folder 3

American Physical Society, correspondence concerning Durham, NC, meeting on March 26, 1953, by date, December 22, 1952 - April 9, 1953, correspondents

- Blisard, Thomas J., Hans Freistadt, and Irving Zinnes
- Brode, Robert B.
- Fuson, Nelson
- Fuson, Nelson to Karl K. Darrow
- Porter, Earl W.
- Van Vleck, J. H.

Box 15

Folder 4

American Physical Society, correspondence concerning Washington, DC, meeting on May 1, 1953, by date, February 18, 1953 - May 4, 1953, correspondents

- Boyce, J. C.
- Brode, Robert B.
- Darrow, Karl K.
- Darrow, Karl K. to Felix Bloch
- Herzfeld, Regina and Karl
- Pegram, George B.

Box 15

Folder 5

American Physical Society, correspondence concerning Rochester, NY, meeting on June 23, 1953, by date, January 31, 1953 - May 29, 1953, correspondents

- Darrow, Karl K.

Box 15

Folder 6

American Physical Society, correspondence concerning Albuquerque, NM, meeting on September 2-5, 1953, by date, May 22, 1953 - June 1, 1953, correspondents

- Kaplan, Joseph

Box 15

Folder 7

American Physical Society, correspondence concerning Chicago meeting on November 17, 1953, by date, September 5, 1953 - November 17, 1953, correspondents

- Darrow, Karl K.
- Darrow, Karl K. to Harold A. Johnson
- Darrow, Karl K. to J. Kaplan
- Darrow, Karl K. to S. K. Allison, D. H. Loughridge, and R. S. Mulliken
- Smith, Cyril Stanley
- Weyl, F. Joachim to Karl K. Darrow

Box 15

Folder 8

American Physical Society, meeting agendas, press releases, and minutes

- Minutes, Denver meeting, June 30, 1952, typescript
- Epitome, Denver meeting, June 30, 1952, typescript
- Agenda, St. Louis meeting, November 28, 1952, typescript
- Minutes, St. Louis meeting, November 28, 1952, typescript
- Press release on government restrictions on travel by physicists, St. Louis meeting, November 28, 1952, typescript, plus earlier drafts
- Minutes, Cambridge meeting, January 21, 1953, typescript
- Minutes, Durham meeting, March 26, 1953, typescript
- Minutes, Washington meeting, April 29, 1953, typescript
- Press release on the Astin dismissal, Washington meeting, May 1, 1953, typescript
- Minutes, Rochester meeting, June 23, 1953, typescript
- Minutes, Chicago meeting, November 27, 1953, typescript

Box 15

Folder 9

American Physical Society, Auditor's Report, December 31, 1951

Box 15

Folder 10

American Physical Society, "American Society for Engineering

- Education Plans," memorandum to Committee on Physics in Engineering Education, American Association of Physics Teachers, August 9, 1954, typescript

Box 15

Folder 11

American Physical Society, miscellaneous documents

- "Suggested Nominations for Fellow A.P.S.," typescript, undated
- Graphs from a paper delivered at the Denver meeting, June 30, 1952

Series V: Federal Government

Series V, Federal Government, contains correspondence with U. S. Senators and Representatives about pending government investigations and legislation, including the 1945 McMahon bill on Atomic Energy, the investigation into Bruno Pontecorvo's defection, and the National Science

Foundation Act of 1947. The bulk of the subseries, however, is comprised of correspondence, contracts, and miscellaneous documents relating to Fermi's work with the AEC (including Argonne National Laboratory and Los Alamos Scientific Laboratory), the Office of Naval Research (see also Box 17, Folder 15), and the U. S. Office of Scientific Research and Development. These materials are categorized alphabetically by agency, division, project, or office, and are subdivided further within each of these categories. At the end of the series are files of correspondence, legal briefs, press releases, and other documents pertaining to the 1953 dismissal and reinstatement of Dr. A. V. Astin as Director of the National Bureau of Standards, as well as to the 1954 AEC hearings on the suspension of J. Robert Oppenheimer's AEC security clearance.

Box 15
Folder 12
Correspondence with U. S. Senators and Representatives, A-Z
- Cole, Sterling (Rep.-NY)
- Douglas, Emily Taft (Rep.-IL)
- Luce, Clare Booth (Rep.-CT)
- McMahon, Brien (Sen.-CT)
- Magnusson, Senator Warren G. (September 13, 1945)
- Priest, J. Percy (Rep.-TN)

Box 15
Folder 13
Correspondence with Edward Shils about the 1945 McMahon bill, including several typescript drafts of a statement entitled "Comments on the McMahon bill on ATOMIC ENERGY"

Box 15
Folder 14
79th Congress, 1st Session, Bill S. 1717 ("The McMahon Bill "), reprint
- Public Law 585 - 79th Congress [S. 1717] ("Atomic Energy Act of 1946"), reprint

Box 15
Folder 15
80th Congress, 1st Session, Bill S. 526 (National Science Foundation Act of 1947), reprint

Box 15
Folder 16
"Comparative Summary of Key Senate Bills for Domestic Control of Atomic Energy," typescript, undated

Box 15
Folder 17
Atomic Energy Commission (AEC), general correspondence with enclosures (reimbursement forms, payment receipts, faculty outside earnings forms, etc.), by date, January 25, 1950 - June 15, 1950, correspondents
- Caspar, Barry
- Chelius, Leo G.
- Haynes, F. B.
- Sykes, J. B.
- Tomei, Anthony

- Tomei, Anthony to Josie Webb
- Weil, George L.

Box 15

Folder 18

AEC, general correspondence with enclosures, by date, June 27, 1950 - November 3, 1950, correspondents

- Chelius, Leo G.
- Hafsted, Lawrence and Kenneth S. Pitzer
- McCormack, Jr., James
- Office of Technical Service, U. S. Department of Commerce
- Tomei, Anthony
- Weil, George L.
- West, Francis T.
- Young, Hoylande
- Young, Hoylande to Anthony Tomei

Box 15

Folder 19

AEC, general correspondence with enclosures, by date, November 30, 1950 - May 18, 1954

- Beckerley, James G.
- Caspar, Barry
- Commanding Officer, Office of Naval Research
- Dodson, H. L.
- Frey, O.
- Harrell, W. B.
- Heslep, Charter
- Johnson, Lyall
- Kirkman, Robert W.
- Kolstad, George A.
- LaPlante, Bryan F.
- Russell, Katherine
- Test, Francis W.
- Thompson, Alberto F.
- York, Foster

Box 15

Folder 20

AEC, Argonne National Laboratory, correspondence and enclosures (patent forms, security questionnaires, shipment memoranda, etc.), by date, July 15, 1947 - February 2, 1954, correspondents

- Boyce, Joseph C.
- Collier, George
- Hilberry, Norman
- Hughes, Donald
- McKinley, J. H.
- McNeill, C. A.
- Phelan, E. W. to A. Tammaro

- Pisapia, V. A.
- Plunkett, D. A.
- Roberts, Walter R.
- Trocino, Joseph L.
- Zinn, Walter
- Manuscript note, undated

Box 15

Folder 21

AEC, Argonne National Laboratory, "Access Agreement," signed, October 1, 1953

Box 15

Folder 22

AEC, Argonne National Laboratory, "Resume of Discussion of Meeting of May 10 of Committee on 'Argonne National Laboratory,'" May 14, 1954

Box 15

Folder 23

AEC, Brookhaven National Laboratory (Prime Contract No. AT-30-2-GEN-16, Subcontracts 244 and 544), correspondence, contracts, travel vouchers, meeting minutes, and classified material receipt form, by date, June 4, 1953 - June 28, 1954, correspondents

- Harrell, W. B.
- University National Bank

Box 15

Folder 24

AEC, Isotopes Division, correspondence and enclosures (isotope request and shipment forms, data forms, miscellaneous Isotope Division reports, etc.), by date, January 19, 1950 - September 12, 1952, correspondents

- Anderson, Herbert L. to Paul C. Abersold
- Chelius, Leo G.
- Dunn, Paul F.
- Keim, C. P.
- Taylor, Lauriston S.

Box 15

Folder 25

AEC, Los Alamos Scientific Laboratory, correspondence and enclosures (contracts, travel receipts, room inventories, housing forms), by date, January 22, 1951 - September 25, 1952, correspondents

- Bills, E. S.
- Bradbury, N. E.
- Crew, William H.
- Doty, E. W.
- Harrell, W. B.
- Herzog, John K.

Box 15

Folder 26

AEC, Los Alamos Scientific Laboratory, correspondence and enclosures (expense account rules, arrival procedure, house inventory, library inventory, contracts, classified materials

receipt form, security clearance form, transportation tax exemption forms), by date, January 22, 1951 - September 25, 1952, correspondents
- Aldrich. W. Tyler
- Dickason, Donald P.
- Dunn, T. A.
- Employment Office
- Fagerstrom, Irene
- Harrell, W. B.
- Smith, Ralph Carlisle

Box 16

Folder 1

AEC, Los Alamos Scientific Laboratory, Document Security Bulletin Revisions, October 20, 1952, and December 15, 1953

Box 16

Folder 2

AEC, Los Alamos Scientific Laboratory, citation for outstanding achievements, President Dwight D. Eisenhower, July 8, 1954

Box 16

Folder 3

AEC, Los Alamos Scientific Laboratory, correspondence and press release on controversial claims made in James Shepley and Clay Blair's book The Hydrogen Bomb (1954), by date, September 23, 1954 -October 4, 1954, correspondents
- Dean, Gordon
- Editors of TIME-LIFE
- Glanzberg, Alvin
- Press release, typescript draft and copies, written by Fermi

Box 16

Folder 4

AEC, Midwest cosmotron/bevatron project, correspondence, by date, January 30, 1953 - August 18, 1953, correspondents
- Allison, S. K., et al, to T. H. Johnson
- Anderson, Herbert L.
- Boyce, J. C.
- Johnson, T. H. to W. H. Zinn
- Kerst, Donald W.

Box 16

Folder 5

AEC, Midwest cosmotron/bevatron project, "Feasibility Study," no date

Box 16

Folder 6

AEC, Oak Ridge Institute of Nuclear Studies, Fellowship Board, correspondence and enclosures (application forms, questionnaires), by date, February 24, 1950 - February 28, 1952, correspondents
- Clark, M. T.
- Goldberger, Marvin L. to Chairman of the AEC Fellowship Board
- Klopsteg, Paul E. to Jay Orear

- Klopsteg, Paul E. to Robert A. Schluter
- Klopsteg, Paul E. to W. B. Harrell
- Lawson, A. W.
- Midwestern AEC Fellowship Board
- Poor, Russell S.
- Schluter, Robert A. to Midwestern AEC Fellowship Board
- Vorhees, H. R.

Box 16

Folder 7

AEC, Oak Ridge Institute of Nuclear Studies, Newsletter, Vol. 6, No. 4 (October 1953); Annual Report, No. 7, July 1, 1952, to June 30, 1953

Box 16

Folder 8

AEC, "Theory of Nuclear Forces" contract, draft of contract proposal, and correspondence, by date, June 8, 1953 - March 1954, correspondents

- Harrell, W. B. to Chicago Operations Office of the AEC
- Kolstad, George A.
- Murphy, Thomas F.

Box 16

Folder 9

AEC, University of Chicago, Basic Nuclear Physics Research Contract [AEC Contract No. AT(11-1)-264], account information, expenditure summaries, salary chart, manuscript list of "possible lecturers," contract extension proposal, budget proposal, and correspondence, by date, July 8, 1953 - June 11, 1954, correspondents

- Fagerstrom, Irene to W. L. Thaggard
- Feynman, R. P.
- Harrell, W. B. to Chicago Operations Office of the AEC

Box 16

Folder 10

AEC, University of Chicago, High Speed Electronic Computer Contract, preliminary proposal, proposal, telephone conversation notes, and correspondence, by date, April 5, 1954 - September 10, 1954, correspondents

- Anderson, Herbert L. to George A. Kolstad
- Anderson, Herbert L. to Walter Bartky
- Anderson, Herbert L. to William B. Harrell
- Harrell, W. B. to Chicago Operations Office of the AEC
- Harrell, W. B. to George A. Kolstad
- Kimpton, Lawrence A.
- Kolstad, George A.
- Kolstad, George A. to William B. Harrell

Box 16

Folder 11

AEC, University of Chicago, High Speed Electronic Computer Contract, blueprints for possible computer locations in the Enrico Fermi Institute

Box 16

Folder 12

U.S. Navy, Office of Naval Research (ONR), correspondence, September 3, 1946 - October 7, 1947, correspondents

- Bolster, C. M.
- Killian, Thomas J.
- Murray, James J.
- Singer, S. Fred
- Wadell, R. P.
- Waterman, Allen T.
- Young, R. C.

Box 16

Folder 13

U.S. Navy, ONR, Chicago Branch Office personnel list

Box 16

Folder 14

U.S. Navy, ONR, research proposals for "Atomic Nuclear Plate Developer," "Pair Spectrometer," and "Research on Low Energy Proton Studies"

Box 16

Folder 15

U.S. Navy, ONR, receipt of printed material forms, by date, September 6, 1950 - October 9, 1950

Box 16

Folder 16

U.S. Navy, ONR, Security Guide for ONR Contractors, and Contractors' Manual

Box 16

Folder 17

U.S. Office of Scientific Research and Development, correspondence from V. Bush to Enrico Fermi, August 19, 1941

Box 16

Folder 18

The Astin Case, correspondence and notes, by date, March 31, 1953 - April 7, 1953, correspondents

- Bethe, Hans A.
- Brode, Robert B.
- Darrow, Karl K.
- Loomis, Willard (notes from telephone call)
- Naval Research Laboratory scientists (Birks, L. S., et al)
- Officers and Members of the Council of the American Physical Society
- The Astin Case: correspondence and notes, by date, March 31, 1953-April 7, 1953, correspondents
- Schiff, L. I.
- Washington D. C. members of the American Physical Society (Herzfeld, Karl F., et al)

Box 16

Folder 19

The Astin Case: correspondence and notes, by date, April 8, 1953 - April 13, 1953, correspondents

- Bacher, Robert (notes from telephone call)

- Beams, J. W.
- Bethe, Hans A.
- Compton, Karl T.
- Darrow, Karl K.
- Goudsmit, S. A.
- Harrison, George to Sinclair Weeks
- Houston, W. V.
- Kaplan, Joseph
- Masterson, W. H.
- Millikan, Robert A.
- Pegram, George B.
- Rabi, I. I.
- Shockley, W.
- Swann, W. F. G.
- Weeks, Sinclair to George Harrison
- Manuscript notes about various physicists' stances on the Astin case

Box 16

Folder 20

The Astin Case, correspondence and notes, by date, April 14, 1953 - June 11, 1953, correspondents

- Bacher, Robert F. to Hans A. Bethe and I. I. Rabi
- Bethe, Hans A.
- Bethe, Hans A., Robert F. Bacher, and I. I. Rabi
- Bethe, Hans to Robert F. and I. I. Rabi
- Bronk, Detlev W. to the Members of the National Academy of
- Darrow, Karl K.
- Hill, David L.
- Loomis, Wheeler
- Officers and Members of the Council of the American Physical Society Sciences
- Form letter to correspondents who had already written Fermi about the Astin case

Box 16

Folder 21

The Astin Case, newspaper clippings, March 31, 1953, to April 17, 1953

Box 16

Folder 22

The Astin Case, Federation of American Scientists, press releases and newsletters, by date, March 31, 1953 - October 19, 1953

Box 16

Folder 23

The Astin Case, Atomic Scientists of Chicago, press release, mimeograph copy, April 11, 1953

Box 16

Folder 24

The Astin Case, American Institute of Physics, press releases, April 13, 1953

Box 16

Folder 25

The Astin Case, reprint from Congressional Record of Rep. DeWitt S. Hyde's speech on the Astin case, April 15, 1953

Box 17

Folder 1

The Oppenheimer Case, correspondence with Lloyd K. Garrison and enclosures, including transcript of summation to the AEC Personnel Security Board and brief filed to the same board on behalf of Oppenheimer, by date, March 30, 1954 - May 17, 1954

Box 17

Folder 2

The Oppenheimer Case, correspondence with Allan B. Ecker and enclosures, including brief filed to the AEC on behalf of Oppenheimer and a packet of press releases, by date, June 5, 1953 - June 11, 1953

Box 17

Folder 3

The Oppenheimer Case, correspondence with Hans A. Bethe andenclosures, including Council of the American Physical Society press release, June 9, 1954

Series VI: Research

Series VI, Research, contains notes, correspondence, and reprints of publications relating to Fermi's scientific research, patent claims, and relationship to organizations sponsoring and/or conducting research. The bulk of the series consists of the files of research-related notes and publications that Fermi called his "artificial memory." The series is divided into four subseries: 1. Research Institutes, Councils, and Foundations, 2. Patents, 3. Artificial Memory, 4. Miscellaneous.

Subseries I, Research Institutes, Councils, and Foundations, contains correspondence and other materials relating to Fermi's research for, and professional relationship to, various scientific research institutes, councils, and foundations between 1946 and 1954. Materials are arranged alphabetically by organization and then further subdivided within each division. Organizations covered are the Institute for Nuclear Studies at the University of Chicago, the National Research Council, the National Science Foundation, and the Swedish Royal Academy of Sciences (Nobel Prize Committee). Materials include research proposals, evaluations of research proposals, expense reports, personnel lists, sponsor lists, Nobel Prize nomination letters, and various administrative records.

Subseries 2, Patents, contains correspondence and legal documents relating to patent claims made by Fermi and Fermi et al. in the U. S. and in Canada, as well as copies of several U. S. patents issued to Fermi during and after his lifetime. These include the first patent ever issued for a basic nuclear reactor (U. S. Patent No. 2,708,656). The bulk of the correspondence and legal documentation relates to the patent claim of Fermi et al. against the Atomic Energy Commission for compensation for a process to produce radioactive substances (U. S. Patent No. 2,206,634).

Subseries 3, Artificial Memory, contains the files of scientific research-related materials that Fermi nicknamed his "artificial memory." The files consist of indexed folders of notes, formulas, calculations, graphs, blueprints, maps, memoranda, transparencies, pamphlets, writings by other physicists, and some correspondence. These materials remain foldered and indexed according to

Fermi's own numerical cataloging system, the key to which can be found in Box 20. Fermi filed bound and/or published scientific papers separately within his "artificial memory." These files are contained in Box 23, Folder 11, through Box 39, Folder 11.

Subseries 4, Miscellaneous, includes a variety of scientific research-related notes, calculations, graphs, reprints, and data Notebooks, as well as materials related to industrial and wartime applications of nuclear energy. Of particular note in this subseries are: a diagram of the first atomic pile, a photograph of the galvanometer reading at the start of the first self-sustaining chain reaction, and the Manhattan Engineer District reports on the atomic bombings of Hiroshima and Nagasaki. Box 41 contains two sets of files of research-related notes and reprints that Fermi housed in two portable accordion-style Notebooks. These files remain arranged and indexed according to the cataloging codes that Fermi devised for them. The key to the alphabetical codes used to organize the first of these Notebooks is located in Box 41, Folders 21. The numerical codes used to organize the second Notebook (Box 41, Folders 22-27) appear to match those used to organize the "artificial memory," but the numerical and alphabetical codes written on the materials contained in these files often do not match the codes on the files themselves.

Subseries 1: Research Institutes, Councils, and Foundations

Box 17
Folder 4
National Research Council, Advisory Committee, correspondence with R. C. Gibbs about a third party's research proposal, by date, May 12, 1952 - May 19, 1952

Box 17
Folder 5
National Science Foundation, Advisory Committee, correspondence and enclosures (copies of, evaluations of, and guidelines for evaluating, third parties' research proposals for NSF grants; applications for NSF pre-doctoral fellowships), by date, March 18,1952 - April 30, 1954, correspondents

- Dees, Bowen C.
- Kelly, Harry C.
- Klopsteg, Paul E.
- Kratz, Paul H.
- McMillen, J. Howard

Box 17
Folder 6
University of Chicago, Institute for Nuclear Studies (UC-INS), miscellaneous documents, administrative organization charts and memoranda; memoranda relating to the Round Table at the dedication of the Institutes, May 16, 1951; memorandum and plan for Institute construction program, April 30, 1947; summaries of INS research projects; announcements of Theoretical Physics Seminars, March 10, 1952, to April 2, 1954

Box 17
Folder 7
UCINS, brochure, "The University of Chicago, Research in Atomic Structure and Energy," June 15, 1946, mimeograph

Box 17
Folder 8
UC-INS, personnel lists, fellowship action lists, and proposed appointments list, by date, May 13, 1947 - October 1, 1954
Box 17
Folder 9
UCINS, expense and budget reports, First Quarter, 1950-1951, to August 1954
Box 17
Folder 10
UCINS, classified materials and registered mail receipts, with accompanying letters of acknowledgment, by date, December 30, 1948 - June 1, 1954, correspondents
- Challenger, Helen
- Starr, Chauncey
- Young, Hoylande D. to Mary E. Waisman
- Young, Hoylande D. to N. T. Bray
- Young, Hoylands D. to Knolls Atomic Power Laboratory

Box 17
Folder 11
UCINS, summaries of INS research projects, with cover letter, dated January 14, 1947, from Emery T. Filby to the Manhattan District, Corps of Engineers
Box 17
Folder 12
UCINS, list of research sponsors of the Institutes of the University of Chicago; reprint from Business Week, June 10, 1950, "Research: Anything Goes - Industry Foots the Bill"; correspondence, memoranda, and documents relating to Fermi's visit to the Pittsburgh Plate Glass Company (an INS sponsor) on May 4, 1950, correspondents
- Allison, Samuel K.
- Pechukas, Alphonse
- Strain, Franklin to Alphonse Pechukas
- Strain, Franklin to Theodore M. Switz
- Switz, Theodore M.
- Switz, Theodore M. to Alphonse Pechukas
- Switz, Theodore M. to J. H. Sherts

Box 17
Folder 13
UC-INS, correspondence regarding the betatron
- John A. Simpson to H. L. Buchanan (General Electric), April 20, 1950 John A. Simpson to George Spellmire (General Electric), May 2, 1950

Box 17
Folder 14
UCINS, Greenewalt Nuclear Physics Research Fund, correspondence, memoranda, and documents (account balances; purchase requests), by date, September 26, 1950 - August 30, 1954,
- Cooper, Charles M.
- Greenewalt, Crawford H.
- Kimpton, Lawrence A. to Crawford H. Greenewalt

Box 17
Folder 15
UC-INS, 170-inch Cyclotron Project with the Office of Naval Research, correspondence, memoranda, and proposals for its construction, budget, and operation, by date, January 29, 1947, to January 12, 1951, correspondents
- Allison, Samuel to D. P. Watson
- Allison, Samuel to K. Caird
- Anderson, Herbert L. to Commander of the New York Naval Shipyard
- Anderson, R. K. to Samuel Allison
- Atomic Energy Commission to Samuel K. Allison
- Harrell, W. B. to Wylie Brown
- Hughes, J. N. to Samuel Allison
- Wulff, J. T. to Samuel Allison
- Wylie Brown to Samuel Allison (telephone call notes)

Box 18
Folder 1
UC-INS, blueprints for Institute of Nuclear Studies, undated

Box 18
Folder 2
UC-INS, blueprint for betatron, undated

Box 18
Folder 3
Argonne National Laboratory Physics Division Electronic Computer Project, blueprints for "George," May-June 1954

Box 18
Folder 4
"Los Alamos Ranch School & Vicinity, including portions of Santa Fe & Sandoval Counties, December, 1943," map, 1inch=1mile

Box 18
Folder 5
Tube Assembly, blueprint with annotations, two copies, April 15, 1947
- Diagram related to tube assembly, manuscript, undated

Box 19
Folder 1
Swedish Royal Academy of Sciences, Nobel Committee for Chemistry, Nobel Committee for Physics, correspondence over candidates to nominate for Nobel Prizes in Physics and Chemistry, programs from Nobel Foundation meetings, lists of Nobel Prize winners, by date, January 2, 1941 - September 1, 1953, correspondents
- De Hevesy, George
- Faendrick, C. E.
- Franck, James
- Nobel Committee for Chemistry
- Nobel Committee for Physics
- Ölander, Arne
- Siegbahn, Manne
- Westgren, A.

Subseries 2: Patents

Box 19
Folder 2

Patent claim of Enrico Fermi et al. against the Atomic Energy Commission (U. S. Patent No. 2,206,634: "Process for the Production of Radioactive Substances"), correspondence and enclosures, by date, July 31, 1941 - February 26, 1946, correspondents

- Alien Property Custodian
- Gabriel M. Giannini to Emilio Segrè
- Giannini, Gabriel M.
- Giannini, Gabriel M. to Vannevar Bush
- Metcalf, H. E.
- Safford, Truman S.
- Segrè, Emilio
- Segrè, Emilio to Captain Lavender
- Segrè, Emilio to Gabriel M. Giannini
- Vogel, F. M. to Gabriel M. Giannini
- Waldo, C. Ives
- Wenderoth, E. F. to F. M. Vogel

Box 19
Folder 3

Patent claim of Enrico Fermi et al. against the Atomic Energy Commission (U. S. Patent No. 2,206,634: "Process for the Production of Radioactive Substances"), correspondence and enclosures, by date, May 24, 1946 - June 27, 1949, correspondents

- Bernard, Lawrence J.
- Bernard, Lawrence J. to Gabriel M. Giannini
- Bernard, Lawrence J. to United States Atomic Energy Commission
- Giannini, Gabriel M.
- Giannini, Gabriel M. to Emilio Segrè
- Giannini, Gabriel M. to Franco Rasetti
- Giannini, Gabriel M. to Lawrence J. Bernard
- Giannini, Gabriel M. to Vannevar Bush
- Rasetti, Franco
- Segrè, Emilio to Gabriel M. Giannini

Box 19
Folder 4

Patent claim of Enrico Fermi et al. against the Atomic Energy Commission (U. S. Patent No. 2,206,634: "Process for the Production of Radioactive Substances"), correspondence and enclosures, by date, July 15, 1949 - October 30, 1950, correspondents

- Bernard, Lawrence J.
- Bernard, Lawrence J. to Gabriel M. Giannini
- Giannini, Gabriel M.
- Giannini, Gabriel M. to Emilio Segrè
- Ramey, James T.
- Segrè, Emilio
- Segrè, Emilio to Gabriel M. Giannini

- Volpe, Jr., Joseph

Box 19

Folder 5

Patent claim of Enrico Fermi et al. against the Atomic Energy Commission (U. S. Patent No. 2,206,634: "Process for the Production of Radioactive Substances"), correspondence and enclosures, including summary of meeting of interested parties in Washington, Oct. 27, 1953, to discuss settlement of similar claims with the Canadian government, and of investigating patent rights in Britain, by date, November 24, 1950 - March 9, 1954, correspondents

- Anderson, Roland A. to Lawrence J. Bernard
- Bernard, Lawrence J.
- Bernard, Lawrence J. to Franco Rasetti
- Giannini, Gabriel M.
- Giannini, Gabriel M. to Franco Rasetti
- Giannini, Gabriel M. to Lawrence J. Bernard
- Kimpton, Lawrence A.
- Rasetti, Franco
- Rasetti, Franco and Enrico Fermi to Gabriel M. Giannini
- Rasetti, Franco to Edoardo Amaldi, Enrico Fermi, and Emilio Segrè
- Rasetti, Franco to Emilio Segrè
- Rasetti, Franco to Gabriel M. Giannini
- Rasseti, Franco to Emilio Segrè
- Segrè, Emilio
- Segrè, Emilio to Franco Rasetti
- Segrè, Emilio, Enrico Fermi, and Franco Rasetti to Edoardo Amaldi, D'Agostino, and G. C. Trabacchi

Box 19

Folder 6

Patent claim of Enrico Fermi et al. against the Atomic Energy Commission (U. S. Patent No. 2,206,634: "Process for the Production of Radioactive Substances"), legal documents and issued patent, by date, October 7, 1935 - June 6, 1949

- Agreement between G. M. Giannini and Company, Inc., and the inventors, whereby the inventors assign the invention to the company in return for subvention of all patent and licensing claims and administration, New York, October 7, 1935
- Supplemental agreement between Giannini and the inventors,regarding the assignment of rights in other countries, New York, October 7, 1935
- Agreement between N. V. Philips' Gloeilampenfabrieken, G. M. Giannini and Company, and Emilio Segrè for the inventors, assigning to Philips the agency of the patents, applications and licenses in all countries except the United States, Canada, Newfoundland, Great Britain and Italy, March 10, 1939
- U.S. Patent No. 2,206,634 ("Process for the Production of Radioactive Substances"), July 2, 1940, three copies
- U.S. Atomic Energy Commission, Patent Compensation Board,"Response in re Application of G. M. Giannini and Company, Inc.," AEC Docket No. 2, June 6, 1949

Box 19

Folder 7

U.S. Patent No. 2,206,634 ("Process for the Production of Radioactive Substances"), U. S. Patent Application No. 57,325 ("Composition of Matter and Method of Producing the Same"), and Canadian patent application No. 425,850 ("Composition of Matter and Method of Producing the Same"), correspondence, legal documents, and notes, by date, December 5, 1936 - June 6, 1949 Affadavit and supplemental oath of Enrico Fermi to the U.S. Patent Office in filing an application for a patent, Application No. 57,325, filed January 2, 1936, Affadavit dated December 5, 1939

- Brief submitted on behalf of Fermi by L. P. Graner on appeal of rejection of Application No. 57,325, with cover letter dated May 8, 1941
- Assignment of Canadian patent application No. 425,850, held by E.
- Fermi, to G. M. Giannini and Company, Affadavit of identification and assignment, May 7, 1942, with cover letter from F. M. Vogel, March 5, 1942
- Status of citizenship affidavit to Alien Property Custodian, cover letter from Truman S. Safford, September 22, 1942
- Alien Property Custodian Interest in Patents declaration, Patent No. 2,206,634, September 22, 1942
- APC Interest in Patents declaration, Patent Application No. 57,325, carbon and photostat, with accompanying citizenship declaration affidavit, October 27, 1942
- Commission to Robert A. Lavender to inspect and make copies of Patent Application No. 57,325, November 12, 1943
- Notes of conferences with Emilio Segrè and Colonel Peterson on patent matters, May 10, 1944, May 23, 1944, and February 13, 1946, and between Segrè, Bernard and F. Rasetti, September 11, 1952
- Petition filed in the U.S. Court of Claims by Giannini and Company against the United States of America, August 17, 1950
- General release and waiver of patent rights under patent No. 2,206,634, assigned to G. M. Giannini and Company, June 15, 1953
- Memorandum from Giannini and Company regarding income tax claims on patent settlement
- Notes regarding patent claims, manuscript
- Public release by G. M. Giannini, stating that he is dropping his part in the suit in the Court of Claims because of the defection of Bruno Pontecorvo, one of the interested parties
- Claim filed by N. V. Phillips' Gloeilampenfabriken and Hartford National Bank and Trust Company for compensation for revocation of their license rights relating to fissionable materials (Re: U. S. Patent No. 2,206,634)

Box 19

Folder 8

Patents by Enrico Fermi and Enrico Fermi et al. filed with the U. S. Patent Office and turned over to the AEC (Patent No. 641,625: "Shield"; Patent Nos. 323,451, 323,452, and 323,453: "Chain Reactions"), contracts, U. S. Patent Office memoranda, secrecy orders, rescinding orders for secrecy orders, payment receipt, and accompanying correspondence, by date, March 10, 1939 - March 9, 1954.

- Correspondents- York, Foster

Box 19

Folder 9

Patents by Enrico Fermi and Enrico Fermi et al filed with the U. S. Patent Office and turned over to the AEC

- U. S. Patent No. 2,524,379 ("Neutron Velocity Selector"), October 3, 1950
- U. S. Patent No. 2,708,656 ("Neutronic Reactor"), May 17, 1955, with accompanying correspondence from Foster York to Laura Fermi, June 8, 1955
- U. S. Patent No. 2,768,134 ("Testing Material in a Neutronic Reactor"), October 23, 1956, with accompanying correspondence from John A. Horan to Laura Fermi, December 11, 1956
- U. S. Patent No. 2,780,595 ("Test Exponential Pile"), February 5, 1957
- U. S. Patent No. 2,807,727 ("Neutronic Reactor Shield"), September 24, 1957

Box 19

Folder 10

Patents by Enrico Fermi and Enrico Fermi et al filed with the U. S. Patent Office and turned over to the AEC

- U. S. Patent No. 2,798, 847 ("Method of Operating a Neutronic Reactor"), July 9, 1957
- U. S. Patent No. 2,837,477 ("Chain Reacting System"), June 3, 1958, with accompanying correspondence from George H. Lee to Laura Fermi, September 23, 1958
- Patents by Enrico Fermi and Enrico Fermi et al filed with the U. S. Patent Office and turned over to the AEC
- U. S. Patent No. 2,836,554 ("Air Cooled Neutronic Reactor"), May 27, 1958, with accompanying correspondence from George H. Lee to Laura Fermi, April 8, 1959
- U. S. Patent No. 2,813,070 ("Method of Sustaining a Neutronic Chain Reacting System"), November 12, 1957, with accompanying correspondence from George H. Lee to Laura Fermi, June 8, 1959
- U. S. Patent No. 2,807,581, September 24, 1957, corrected copy, with cover letter from George H. Lee to Laura Fermi, July 22, 1959
- U. S. Patent No. 2,852,461 ("Neutronic Reactor"), September 16, 1958, with accompanying correspondence from George H. Lee to Laura Fermi, December 8, 1959
- U. S. Patent No. 2,931,762 ("Neutronic Reactor"), April 5, 1960, with accompanying correspondence from George H. Lee to Laura Fermi, October 20, 1960
- U. S. Patent No. 2,969,307 ("Method of Testing Thermal Neutron Fissionable Material for Purity"), Jan. 24, 1961

Subseries 3: Artificial Memory

Box 20

Fermi's card index to his "artificial memory," 3x5 cards, with accompanying loose-leaf binder containing key to the index

Box 21

Folder 1

0-General Physics

Box 21

Folder 2

01-Research Topics

Box 21

Folder 3
12-Hydrodynamics and Aerodynamics
Box 21
Folder 4
15-Statistical Mechanics
Box 21
Folder 5
202-Magnetism
Box 21
Folder 6
203-Electromagnetism and Waves
Box 21
Folder 7
21-Electronics and Radiofrequency
Box 21
Folder 8
31-Relativity (Special)
Box 21
Folder 9
32-Relativity (General)
Box 21
Folder 10
34-General Quantum Mechanics Theories
Box 21
Folder 11
344-Quantum Electrodynamics
Box 21
Folder 12
345-Collision Theory
Box 21
Folder 13
346-Field Theories
Box 21
Folder 14
4-Elementary Particles
Box 21
Folder 15
41-Proton and Neutron
Box 21
Folder 16
415-Neutron (General)
Box 21
Folder 17
416-Neutron Cross Sections
Box 21
Folder 18

42-Mesons
Box 21
Folder 19
4232-Reactions
Box 21
Folder 20
4234-Passage Thru Matter
Box 21
Folder 21
4235-Theory
Box 21
Folder 22
4236-Production
Box 21
Folder 23
4238-Pion Measurements
Box 21
Folder 24
425-Field Theory of Mesons
Box 21
Folder 25
45-Cosmic Radiation
Box 21
Folder 26
47-Instruments on Elementary Particles
Box 21
Folder 27
471-Counters
Box 21
Folder 28
472-Nuclear Plates
- Includes correspondence with
- Niemeyer, John H. (Eastman Kodak)
- Persico, Enrico
- Spence, John (Eastman Kodak)

Box 21
Folder 29
4742-Gamma Spectrometers
Box 22
Folder 1
4752-Synchrocyclotron
- Includes correspondence with Sam Untermyer

Box 22
Folder 2
4753-Betatron (Blueprint moved to Box 18, Folder 2)
- Includes correspondence with

- Bartky, Walter
- Buchanan, H. F. to Samuel K. Allison
- Charlton, E. E.
- Spellmire, G. W. to John Simpson

Box 22
Folder 3
512-Electron Wave Functions
Box 22
Folder 4
53-States of Matter
Box 22
Folder 5
532-Liquids
Box 22
Folder 6
533-Solids
Box 22
Folder 7
60-General Properties
- Includes A-W Chart of Nuclear Data (Cambridge, MA: Addison- Wesley, 1950)
- Includes correspondence with C. P. Keim

Box 22
Folder 8
601-Nuclear Models
- Includes William H. Sullivan, Trilinear Chart of Nuclear Species (NY: John Wiley & Sons, 1949)

Box 22
Folder 9
612-Beta
Box 22
Folder 10
613-Gamma Rays
Box 22
Folder 11
62-Nuclear Reactions
Box 22
Folder 12
66-Radiation Thru Matter
Box 22
Folder 13
901-Algebra and Calculus
Box 22
Folder 14
902-Functions (special)
Box 22
Folder 15

903-Group Theory
Box 22
Folder 16
907-Numerical Calculations
Box 22
Folder 17
9072-Electronic Computers
Box 22
Folder 18
90721-Maniac
Box 22
Folder 19
90721a-Phase Shifts Problem
- Includes Enrico Fermi, "Phase Shift Analysis of the Scattering of
- Negative Pions by Hydrogen," mimeograph copy
- Includes correspondence with Nicholas Metropolis

Box 23
Folder 1
90722-AVIDAC
- Includes correspondence with Jean F. Hall

Box 23
Folder 2
90723-George (Argonne National Laboratory Physics Division
- Electronic Computer Project)
- Blueprints for George moved to Box 18, Folder 3

Box 23
Folder 3
912-Sun
Box 23
Folder 4
913-Stars
Box 23
Folder 5
914-Galaxy
Box 23
Folder 6
915-Universe
Box 23
Folder 7
92-Geophysics
Box 23
Folder 8
951-Social Sciences
Box 23
Folder 9
952-Politics

- Includes National Academy of Sciences press release in opposition to the National Science Foundation Bill (H. R. 4846), March 10, 1950
- Includes correspondence with Lyman Spitzer, Jr.

Box 23
Folder 10
953-Law
- Includes copy of the Atomic Energy Act of 1946

Box 23
Folder 11
04-Constants

Box 23
Folder 12
203-Electromagnetism and Waves

Box 23
Folder 13
204-Electric Properties of Materials

Box 23
Folder 14
21-Radiofrequency Properties

Box 23
Folder 15
23-Electrical Instruments

Box 23
Folder 16
3-Relativity and Quantum Theory

Box 23
Folder 17
32-General Relativity

Box 23
Folder 18
34-General Quantum Mechanics Theory

Box 24
Folder 1
34-General Quantum Mechanics Theory

Box 24
Folder 2
343-Dirac Theory

Box 24
Folder 3
344-Quantum Electrodynamics

Box 24
Folder 4
344-Quantum Electrodynamics

Box 24
Folder 5
344-Quantum Electrodynamics

Box 24
Folder 6
344-Quantum Electrodynamics
Box 24
Folder 7
346-Field Theories
Box 24
Folder 8
346-Field Theories
Box 25
Folder 1
346-Field Theories
Box 25
Folder 2
346-Field Theories
Box 25
Folder 3
4-Elementary Particles
Box 25
Folder 4
4-Elementary Particles
Box 25
Folder 5
4-Elementary Particles
Box 25
Folder 6
41-Proton and Neutron
Box 25
Folder 7
41-Proton and Neutron
Box 26
Folder 1
410-Nucleons
Box 26
Folder 2
411-Proton (General)
Box 26
Folder 3
415-Neutron (General)
Box 26
Folder 4
415-Neutron (General)
Box 26
Folder 5
416-Neutron Cross Sections
Box 26

Folder 6
416-Neutron Cross Sections
Box 26
Folder 7
417-Neutron Scattering
Box 26
Folder 8
417-Neutron Scattering
Box 26
Folder 9
418-Neutron Diffusion
Box 27
Folder 1
42-Mesons
Box 27
Folder 2
422-Experimental
Box 27
Folder 3
423-π Mesons
Box 27
Folder 4
4232-Reactions
Box 27
Folder 5
4232-Reactions
Box 27
Folder 6
4235-Theory
Box 27
Folder 7
4236-Production
Box 27
Folder 8
4237-Experimental Methods
Box 27
Folder 9
424-Mu Mesons
Box 27
Folder 10
425-Field Theory of Mesons
Box 28
Folder 1
43-Neutrino and Other
Box 28
Folder 2

44-Electron and Positron
Box 28
Folder 3
45-Cosmic Radiation
Box 28
Folder 4
45-Cosmic Radiation
Box 28
Folder 5
450-General Data Origin
Box 28
Folder 6
450-General Data Origin
Box 28
Folder 7
451-Electron-Photon Component
Box 28
Folder 8
451-Electron-Photon Component
Box 28
Folder 9
452-Nuclear Component
Box 29
Folder 1
453-Meson Component
Box 29
Folder 2
453-Meson Component
Box 29
Folder 3
454-Geographic and Time Dependence
Box 29
Folder 4
454-Geographic and Time Dependence
Box 29
Folder 5
455-Primary Radiation
Box 29
Folder 6
455-Primary Radiation
Box 29
Folder 7
456-Stars
Box 29
Folder 8
456-Stars (Schein)

Box 30
Folder 1
456-Stars
Box 30
Folder 2
457-Experimental Techniques
Box 30
Folder 3
47-Instruments on Elementary Particles
Box 30
Folder 4
471-Counters
Box 30
Folder 5
472-Wilson Chambers
Box 30
Folder 6
473-Nuclear Plates
Box 30
Folder 7
474-☒ Spectrometers
Box 30
Folder 8
4741-☒ Spectrometers
Box 30
Folder 9
4742-☒ Spectrometers
Box 30
Folder 10
475-Accelerating Machines
Box 30
Folder 11
475-Accelerating Machines
Box 31
Folder 1
4751-Small Cyclotron
Box 31
Folder 2
4752-Synchrocyclotron
Box 31
Folder 3
4752-Synchrocyclotron
Box 31
Folder 4
4752-Synchrocyclotron
Box 31

Folder 5
4753-Betatron
Box 31
Folder 6
476-Neutron Spectrometer
Box 31
Folder 7
51-Atom
Box 31
Folder 8
512-Electron Wave Functions
Box 31
Folder 9
513-Hyperfine Structure
Box 31
Folder 10
52-Molecules
Box 31
Folder 11
52-Molecules
Box 32
Folder 1
52-Molecules
Box 32
Folder 2
53-States of Matter
Box 32
Folder 3
531-Gases
Box 32
Folder 4
532-Liquids
Box 32
Folder 5
533-Solids
Box 32
Folder 6
533-Solids
Box 32
Folder 7
533-Solids
Box 32
Folder 8
6-Nucleus
Box 32
Folder 9

60-General Properties
Box 33
Folder 1
601-Nuclear Models
Box 33
Folder 2
601-Nuclear Models
Box 33
Folder 3
601-Nuclear Models
Box 33
Folder 4
602-Light Elements A≤4
Box 33
Folder 5
606-Origin of Elements
Box 33
Folder 6
61-Radioactivity
Box 33
Folder 7
61-Radioactivity
Box 34
Folder 1
612-Beta
Box 34
Folder 2
612-Beta
Box 34
Folder 3
612-Beta
Box 34
Folder 4
612-Beta
Box 34
Folder 5
612-Beta
Box 34
Folder 6
613-Gamma Rays
Box 34
Folder 7
613-Gamma Rays
Box 34
Folder 8
613-Gamma Rays

Box 35
Folder 1
614-Nuclear Levels
Box 35
Folder 2
62-Nuclear Reactions
Box 35
Folder 3
62-Nuclear Reactions
Box 35
Folder 4
62-Nuclear Reactions
Box 35
Folder 5
62-Nuclear Reactions
Box 35
Folder 6
63-Nuclear Forces
Box 36
Folder 1
63-Nuclear Forces
Box 36
Folder 2
63-Nuclear Forces
Box 36
Folder 3
64-Spin and Quadrupole Moments
Box 36
Folder 4
65-Interaction of Nuclear and Atomic Structures
Box 36
Folder 5
66-Radiation thru Matter
Box 36
Folder 6
66-Radiation thru Matter
Box 36
Folder 7
67-Nuclear Power
Box 36
Folder 8
68-Fission
Box 36
Folder 9
90-Mathematics
Box 36

Folder 10
901-Algebra and Calculus
Box 36
Folder 11
902-Functions (Special)
Box 36
Folder 12
904-Geometry
Box 37
Folder 1
907-Numerical Calculation
- Includes correspondence
- Kolstad, George A. to Samuel K. Allison

Box 37
Folder 2
907-Numerical Calculation
Box 37
Folder 3
907-Numerical Calculation
Box 37
Folder 4
91-Astronomy
Box 37
Folder 5
911-Planets
Box 37
Folder 6
912-Sun
Box 37
Folder 7
912-Sun
Box 37
Folder 8
913-Stars
Box 38
Folder 1
913-Stars
Box 38
Folder 2
913-Stars
Box 38
Folder 3
914-Galaxy
Box 38
Folder 4
914-Galaxy

Box 38
Folder 5
914-Galaxy
Box 38
Folder 6
915-Universe
Box 38
Folder 7
921-Atmosphere
Box 38
Folder 8
923-Water Bodies
Box 38
Folder 9
924-Earth and its Interior
Box 39
Folder 1
925-Geomagnetism and Electric Phenomena
Box 39
Folder 2
925-Geomagnetism and Electric Phenomena
Box 39
Folder 3
925-Geomagnetism and Electric Phenomena
Box 39
Folder 4
93-Biology and Medicine
Box 39
Folder 5
931-Bacteriology
Box 39
Folder 6
933-Radiation Effects
Box 39
Folder 7
934-Sensory Organs
Box 39
Folder 8
936-Tracer Techniques in Biology
Box 39
Folder 9
938-Genetics
Box 39
Folder 10
94-Chemistry
Box 39

Folder 11
941-Inorganic Chemistry
Box 39
Folder 12
942-Physical Chemistry
Box 39
Folder 13
943-Organic Chemistry
Box 39
Folder 14
954-Philosophy, 991-Geography (contents in Box 18, Folder 4)

Subseries 4: Miscellaneous

Box 40
Folder 1
Documents pertaining to the first self-sustaining chain reaction, "Dec. 2 1942 Start-Up of First Self-Sustaining Chain Reaction, Neutron Intensity in the Pile as Recorded by a Galvanometer," photograph
- Atomic pile face, diagram

Box 40
Folder 2
Malmberg, John H. and L. J. Koester, Jr., Tables of Nuclear Reaction Kinematics at Relativistic Energies, Urbana, IL: University of Illinois Physics Department, July 10, 1953
Box 40
Folder 3
Pion trajectories from Chicago cyclotron, charts in manuscript, 2pp, 1952
Box 40
Folder 4
Notes on the calibration of, and on experimental work with, the synchrocyclotron, in manuscript and in carbon copy of manuscript, 33pp, by date, April 21, 1951 - June 6, 1951
Box 40
Folder 5
Graphs with annotations and [3 transparencies?] from experimental work with the synchrocyclotron, manuscript, 5pp, undated
Box 40
Folder 6
Graphs and calculations on the sensitivity of counters, manuscript, 4pp, undated
- Data and calculations on the sensitivity of counters, spiral-bound Notebook, manuscript, undated

Box 40
Folder 7
"Details of Calculation on the Efficiency of Counters No. 3 and No. 4," no author or date, typescript, with corrections and revisions in Fermi's hand, and carbon copy, 5pp
Box 40
Folder 8

Notes on experiments with recoil protons, in carbon copy of manuscript, 46pp, by date, May 21, 1952 - June 26, 1952

Box 40

Folder 9

Unidentified experiment notes and calculations, manuscript, 4pp, undated

Box 40

Folder 10

Unidentified experiment notes and calculations, manuscript, 13pp, one page dated January 29, 1954

Box 40

Folder 11

Unidentified experiment notes and calculations, manuscript, 16pp, and series computations, 4pp, undated

Box 40

Folder 12

Unattributed typescript annotated "corrected pages for Dr. Anderson's notes," holograph, 2pp, undated

Box 40

Folder 13

Unidentified graph, manuscript, 1p., undated

Box 40

Folder 14

Goudsmit, S. A., "A Time-of-Flight Mass Spectrometer," typescript, undated

Box 40

Folder 15

Hughes, D. J. et al., "Coherent Neutron-Proton Scattering by Liquid Mirror Reflection," carbon copy of typescript, December 5, 1949

Box 40

Folder 16

Balazs, Nandor I., "The Thomas-Fermi Theory of the Atom as a Solution of the Density-Matrix-Hierarchy," copy of typescript, 45pp, undated

Box 40

Folder 17

Shankland, R. S., et al., "A New Analysis of the Interferometer Observations of Dayton C. Miller," typescript, July 7, 1954

Box 40

Folder 18

Latham, R. and J. M. Cassels, "The Scattering of Neutrons by Lead," typescript with annotations in an unknown hand, undated

Box 40

Folder 19

"I Atom-Værkstedet paa Blegdamsvej - ," Berlingske Tidende, newspaper clipping, Friday, September 10, 1954

Box 40

Folder 20

The Industrial Utilization of Fission Products (Gross, Mixed, Separated). A Prospectus for Management, Stanford Research Institute, a study commissioned by the AEC, March 1951

Box 40

Folder 21

Notes and specifications for infantry weapons, and notes on other military applications, manuscript, 14pp, undated

Box 40

Folder 22

Duroux, J. W., "The Situation in Aerial Photography Today," Working Paper No. 33, Air Weapons Research Center, University of Chicago, typescript, holograph, February 23, 1951

Box 40

Folder 23

Manhattan Engineer District, The Atomic Bombings of Hiroshima and Nagasaki, undated

- Manhattan Engineer District, Photographs of the Atomic Bombings of Hiroshima and Nagasaki, undated

Box 41

Folder 1

Research notes and reprints, coded AG [Atom, General] by Fermi AG 1, 51 (Atom): reprint of a German-language article by Fermi, with annotations and attached manuscript notes in Fermi's hand, undated

- AG 2, 51 (Atom): notes in manuscript, undated
- AG 3, 66 (Radiation thru Matter): notes in manuscript, undated
- AG 4, 343 (Dirac Theory): photographic reprint of an article by Morris E. Rose

Box 41

Folder 2

Research notes and reprints, coded AP [Astronomy, Planets] by Fermi

- AP 1, 911 (Planets): notes in manuscript, undated
- AP 2, 911 (Planets): notes in manuscript, undated

Box 41

Folder 3

Research notes and reprints, coded AS [Astronomy, Stars] by Fermi

- AS 1, 913 (Stars): notes in manuscript, undated
- AS 2, 913 (Stars): notes in manuscript, undated
- AS 3, 913 (Stars): notes in manuscript, undated
- AS 4, 91 (Astronomy): notes in manuscript, undated
- AS 5, 913 (Stars): notes in manuscript, undated
- 913 (Stars): notes in manuscript, undated

Box 41

Folder 4

Research notes and reprints, coded CP [Physical Constants] by Fermi

- CP 1, 0 (General Physics): notes in manuscript, undated
- CP 2, 0 (General Physics): Raymond T. Birge, "A Consistent Set of Values of the General Physical Constants (as of August, 1939)," mimeograph of typescript notes, with annotations in Fermi's hand

Box 41
Folder 5
Research notes and reprints, coded EE [Electromagnetism] by Fermi EE 1, 203 (Electromagnetism and Waves): notes in manuscript, no date
- EE 2, 203 (Electromagnetism and Waves): notes in manuscript, no date
- EE 3, 203 (Electromagnetism and Waves): notes in manuscript, no Date

Box 41
Folder 6
Research notes and reprints, coded EM [Electric Measurements] by Fermi
- EM 1, 23 (Electrical Instruments): notes in manuscript, undated

Box 41
Folder 7
Research notes and reprints, coded EO [Electric Waves and Vibrations] by Fermi
- EO 1, 203 (Electromagnetism and Waves): notes in manuscript, undated
- EO 2, 203 (Electromagnetism and Waves): notes in manuscript, undated
- EO 3, 203 (Electromagnetism and Waves): notes in manuscript, undated
- 902 (Functions): notes in manuscript, undated
- EO 4, 21 (Radiofrequency): notes in manuscript, undated
- EO 5, 21 (Radiofrequency): notes in manuscript, undated
- EO 6, 203 (Electromagnetism and Waves): notes in manuscript, undated
- EO 7, 203 (Electromagnetism and Waves): notes in manuscript, undated
- EO 8, 203 (Electromagnetism and Waves): notes in manuscript, undated
- EO 9, 203 (Electromagnetism and Waves): notes in manuscript, undated

Box 41
Folder 8
Research notes and reprints, coded ER [Relativistic Electricity] by Fermi
- ER 1, 31 (Special Relativity): notes in manuscript, undated
- ER 2, 31 (Special Relativity): notes in manuscript, undated
- ER 3, 32 (General Relativity): notes in manuscript, undated

Box 41
Folder 9
Research notes and reprints, coded ES [Equations of State] by Fermi ES 1, 53 (States of Matter): notes in manuscript, undated

Box 41
Folder 10
Research notes and reprints, coded MA [Mathematics, Analysis] by Fermi
- MA 1, 901 (Algebra and Calculus): notes in manuscript, undated
- MA 2, 902 (Functions): notes in manuscript, undated
- MA 3, 902 (Functions): notes in manuscript, undated
- MA 4, 903 (Group Theory): notes in manuscript, undated
- MA 5, "Table of Legendre polynomials," photographic reprints attached to notes in manuscript, undated

Box 41
Folder 11
Research notes and reprints, coded ME [Mathematics, Differential Equations] by Fermi
- ME 1, 901 (Algebra and Calculus): notes in manuscript, undated

- ME 2, 901 (Algebra and Calculus): notes in manuscript, undated
- ME 3, 901 (Algebra and Calculus): notes in manuscript, undated
- ME 4, 901 (Algebra and Calculus): notes in manuscript, undated
- ME 5, 902 (Functions): notes in manuscript, undated
- ME 6, 902 (Functions): notes in manuscript, undated

Box 41

Folder 12

Research notes and reprints, coded MG [Mathematics, Geometry] by Fermi

- MG 1, 904 (Geometry): notes in manuscript, undated
- MG 2, 904 (Geometry): notes in manuscript, undated
- Research notes and reprints, coded MG [Mathematics, Geometry] by Fermi
- MG 3, 904 (Geometry): notes in manuscript, undated
- MG 4, 904 (Geometry): notes in manuscript, undated
- 902 (Functions): notes in manuscript, undated

Box 41

Folder 13

Research notes and reprints, coded MI [Mathematics, Integrals] by Fermi

- MI 1: notes in manuscript, undated
- MI 2: notes in manuscript, undated
- MI 3: notes in manuscript, undated
- MI 4: notes in manuscript, undated

Box 41

Folder 14

Research notes and reprints, coded MP [Point Mechanics] by Fermi MP 1: notes in manuscript, undated

Box 41

Folder 15

Research notes and reprints, coded MR [Relativistic Mechanics] by Fermi

- MR 1: notes in manuscript, undated
- MR 2: notes in manuscript, undated
- MR 3: notes in manuscript, undated
- MR 4: notes in manuscript, undated

Box 41

Folder 16

Research notes and reprints, coded MT [General Mechanical Theorems and Theories] by Fermi:

- MT 1: notes in manuscript, undated
- MT 2: notes in manuscript, undated
- MT 3: notes in manuscript, undated
- MT 4: notes in manuscript, undated
- MT 5: notes in manuscript, undated
- MT 6: notes in manuscript, undated

Box 41

Folder 17

Research notes and reprints, coded NC [Numerical Calculations], NG [Nuclei, General], and NN [Neutrons] by Fermi

- NC 1: logorhythm tables, typescript
- NG: empty file (see Box 41, Folders 22-23)
- NN: empty file (see Box 41, Folder 24)

Box 41
Folder 18

Research notes and reprints, coded QF [Quantum Theories of Fields] by Fermi

- QF 1: notes in manuscript, undated
- QF 2: notes in manuscript, undated
- QF 3: notes in manuscript, undated
- QF 4: notes in manuscript, undated
- QF 5: notes in manuscript, undated
- QF 6: Bethe, H. and Enrico Fermi, "Uber die Wechselwirkung von zwei Elektronen," Zeitschrift für Physik, 1932, reprint
- QF 7: notes in manuscript, undated
- Research notes and reprints, coded QF [Quantum Theories of Fields] by Fermi
- QF 8: Fermi, Enrico, "Quantum Theory of Radiation," Reviews of Modern Physics, 4:1 (1932), reprint
- QF 9: notes in manuscript, undated
- QF 10: notes in manuscript, undated
- QF 11: notes in manuscript, undated
- QF 12: notes in manuscript, undated
- QF 13: notes in manuscript, undated

Box 41
Folder 19

Research notes and reprints, coded QG [Quantum Theory, General] by Fermi

- QG 1: notes in manuscript, undated
- QG 2: notes in manuscript, undated
- QG 3: notes in manuscript, undated
- QG 4: notes in manuscript, undated
- QG 5: notes in manuscript, undated
- QG 6: notes in manuscript, undated
- QG 7: notes in manuscript, undated
- QG 8: notes in manuscript, undated
- QG 9: notes in manuscript, undated
- QG 10: notes in manuscript, undated
- QG 11: notes in manuscript, undated
- QG 12: notes in manuscript, undated
- QG 13: notes in manuscript, undated
- QG 14: notes in manuscript, undated

Box 41
Folder 20

Research notes and reprints, coded RC [Cosmic Radiation] by Fermi RC 1: notes in manuscript, undated

- RC 2: notes in manuscript, undated
- RC 3: notes in manuscript, undated
- RC 4: notes in manuscript, undated

- RC 5: notes in manuscript, undated
- RC 6: notes in manuscript, undated
- RC 7: notes in manuscript, undated
- Uncoded, but filed under RC: notes in manuscript, 3pp, undated
- Uncoded, but filed under RC: equation tables, 2pp, photographic reprint

Box 41

Folder 21

Key to the cataloging system for files AG-RC

Box 41

Folder 22

Research notes and reprints, filed under 60 [also NG Nuclei, General] by Fermi (files 40-44, and 46-47, which preceded file 60 in this Notebook were empty)

- NG 1, 60 (Nucleus, General Properties): notes in manuscript, undated
- NG 3, 63 (Nuclear Forces): notes in manuscript, undated
- Research notes and reprints, filed under 60 [also NG Nuclei, General] by Fermi (files 40-44, and 46-47, which preceded file 60 in this Notebook were empty)
- NG 4, 60 (Nucleus, General Properties): notes in manuscript, undated
- NG 5, 60 (Nucleus, General Properties): notes in manuscript, undated
- NG 6, 61 (Radioactivity, alpha): notes in manuscript, undated
- NG 7, 61 (Radioactivity, alpha): notes in manuscript, undated
- NG 8, 61 (Radioactivity, alpha): notes in manuscript, undated
- NG 9, 61 (Radioactivity, alpha): notes in manuscript, undated
- NG 10, 60 (Nucleus, General Properties): Seaborg, G. T. and I. Perlman, "Table of Isotopes," Reviews of Modern Physics, 20:4 (1948), reprint
- NG 11, 601 (Nuclear Models): notes in manuscript, undated
- NG 12, 60 (Nucleus, General Properties): table in typescript, undated
- NG 13, 60 (Nucleus, General Properties): notes in manuscript, undated
- NG 14, 60 (Nucleus, General Properties): notes in manuscript, undated
- NG 15, 612 (Radioactivity, Beta): notes in manuscript, undated
- NG 16, 62 (Nuclear Reactions): notes in manuscript, undated
- NG 17, 60 (Nucleus, General Properties): notes in manuscript, undated
- 601 (Nuclear Models): notes in manuscript, undated
- NG 18, 601 (Nuclear Models): notes in manuscript, undated
- NG 19, 60 (Nucleus, General Properties): table in holograph of a typescript, with annotations in Fermi's hand, undated
- 601 (Nuclear Models): notes in carbon copy of a manuscript, undated
- NG 19, 62 (Nuclear Reactions): notes in manuscript, undated
- NG 20, 62 (Nuclear Reactions): "Nuclei Formed in Fission: Decay Characteristics, Fission Yields, and Chain Relationships, Issued by the Plutonium Project," Journal of the American Chemical Society, 68 (1946), reprint
- NG 22, 66 (Radiation thru Matter): notes in manuscript attached to copy of charts labeled "Range vs. Energy, Electrons in Aluminum"

Box 41

Folder 23

Research notes and reprints, filed under 601 [also NG Nuclei, General] by Fermi

- NG, 612 (Radioactivity, Beta): notes in manuscript, undated

- NG, 612 (Radioactivity, Beta): copies of charts, undated
- NG 1, 612 (Radioactivity, Beta): Fermi, Enrico, "Versuch einer Theorie der β-Strahlen. I," Zeitschrift für Physik, 1934, reprint with annotations in Fermi's hand NG, 612 (Radioactivity, Beta): "Table of Log Values for β-Decay," mimeograph of typescript

Box 41

Folder 24

Research notes and reprints, filed under 602 [also NN Neutrons] by Fermi

- NN 5, 41 (Proton and Neutron): notes in manuscript, undated
- NN 6, 41 (Proton and Neutron): notes in manuscript, undated
- NN 7, 41 (Proton and Neutron): notes in manuscript, undated
- NN 8, 41 (Proton and Neutron): notes in manuscript, undated
- NN 9, 41 (Proton and Neutron): notes in manuscript, undated
- NN 10, 41 (Proton and Neutron): notes in manuscript, undated
- NN 11, 41 (Proton and Neutron): notes in manuscript, undated
- NN 12, 41 (Proton and Neutron): notes in manuscript, undated

Box 41

Folder 25

Research notes and reprints, filed under 611 by Fermi (file 606, which preceded this file in the Notebook, was empty)

- 64 (Spin and Quadrupole Moments): Poss, Howard L., The Properties of Atomic Nuclei: I. Spins, Magnetic Moments, and Electric Quadrupole Moments (Revised), (Upton, NY: Brookhaven National Laboratory, 1949)

Box 41

Folder 26

Research notes and reprints, filed under 612 by Fermi

- 66 (Radiation thru Matter): Gross, E. G., "Range, Eenergy Ionization Curves, for protons, mesons and electrons in air, aluminum, and lead," Princeton, 1947, copy of typescript

Box 41

Folder 27

Research notes and reprints, filed under 613 by Fermi (files 62-66, which succeeded this file in the Notebook, were empty)

- 606 (Origin of Elements): notes in manuscript, undated
- 613 (Radiation, Gamma Rays): Rose, M. E., et al., "Low Z Internal Conversion Coefficients," copy of typescript, undated
- 613 (Radiation, Gamma Rays): "Rose, M. E., et al., "Tables of K-Shell Internal Conversion Coefficients," mimeograph of typescript, undated

Series VII: Notebooks and Course Notes

Series VII, Notebooks and Course Notes, includes Fermi's research Notebooks, which contain notes and calculations relating to experiments, to various topics in theoretical physics, and to conversations with other physicists. The series also contains his notes for courses, many of which are also bound in Notebooks. Most of the material dates from 1940 to 1954, but there is one Notebook from 1919, when Fermi was a teenager. The series is divided into four subseries: 1. Experimental and Theoretical Physics, 2. Courses, 3. Personal Notes on Physics, and 4. Miscellaneous

Subseries 1, Experimental and Theoretical Physics, includes Notebooks containing notes and calculations on various topics in theoretical physics (Notebooks D01-D16), as well as on experiments belonging both to the period that Fermi was calibrating the Chicago cyclotron and to the early period after its inauguration in September 1951 (Notebooks E1-E2, FA, and ME). These Notebooks cover the years 1940 to 1954 and are arranged in chronological order in the subseries. Fermi carefully indexed and dated most of these Notebooks.

Subseries 2, Courses, contains Fermi's notes for Columbia University and University of Chicago courses, as well as for the Silliman Lectures at Yale University in April 1950, which became the basis for his Elementary Particles book. These Notebooks and unbound notes cover the years 1939 to 1954 and are arranged in chronological order.

Subseries 3, Personal Notes on Physics, contains Notebooks and unbound notes that Fermi compiled on various topics in physics. Many of the Notebooks are undated and sparsely filled. Of particular note, however, is a small Notebook from 1919 which contains notes on physics that Fermi compiled as a teenager.

Subseries 4, Miscellaneous, includes Notebooks containing unindexed and undated notes and calculations pertaining to various theoretical topics and experiments. Most of the Notebooks date to the 1940s, but Notebook S6 contains a few pages of notes regarding the pre-war state of the financial affairs of the Fermi family.

Subseries 1: Experimental and Theoretical Physics

Box 42
Folder 1
Notebook D16, "Enrico Fermi, Columbia University, New York, N.Y.,
- Calculations, 1940," no index, 20 x 27cm, this Notebook contains calculations and a few notes, many of which relate to the Hitchcock lectures that Fermi delivered at Berkeley in February 1940

Box 42
Folder 2
"E. Fermi, Columbia University, New York, N.Y.," June 18, 1940, to November 29, 1940, no index, 192pp, photocopy, contains dated calculations and a few notes

Box 42
Folder 3
Notebook D14, "Numerical Calculations," November 12, 1943, to May 27, 1944, no index, 20 x 27cm, this Notebook consists almost entirely of numerical calculations without, it would seem, much theory. Some of the calculations for the years 1941-1942 can be related to exponential experiments. The quality and format of this Notebook are the same as Notebook D13 (Box 42, Folder 5). It may be that D13 is a continuation of this Notebook

Box 42
Folder 4

Notebook D15, "Enrico Fermi, Calculations," February 12, 1941, to November 1941, no index, 20 x 27cm, this Notebook consists entirely of numerical calculations. Some of these relate to Fermi's early ideas on chain reactions

Box 42

Folder 5

Notebook D13, untitled, undated, no index, 20 x 27cm, 150pp, this Notebook consists almost entirely of calculations without, it would seem, much theory. Some of its calculations and drawings concern neutron diffraction. The Notebook most likely belongs the immediate post-war period, when Fermi used the reactor at the Argonne National Laboratory (CP-3) to work on, among other things, neutron diffraction. The possibility cannot be excluded, however, that it pertains to work that Fermi did during the war. Given that its quality and format are the same as Notebook D14, "Numerical Calculations," it may be a continuation of that Notebook

Box 42

Folder 6

Notebook D12, "E. Fermi, University of Chicago, Notebook 100 (Also ES [i.e. "Equations of State"]), Oct 5, 1945 - Jan 7, 1947," index at the end (p. 298), 20 x 27cm, 298pp, this Notebook contains notes and calculations on various topics, including neutron mirrors and the polarization of neutrons

Box 43

Folder 1

Notebook D11, "E. Fermi, University of Chicago, Notebook 161, Jan 8, 1947 - June 12, 1947," index at the end (pp 138-140), 20 x 27cm, 140pp, this Notebook contains notes and calculations on various topics, including the neutron-deuteron system, scattering of n by electrons in krypton, the form factor for Xe, and mesotrons in high atmosphere

Box 43

Folder 2

Notebook D10, "E. Fermi, University of Chicago, Notebook 102, June 14, 1947 - Nov 28, 1947," index at the end (pp 136-138), 20 x 27cm, 138pp, this Notebook contains notes and calculations on various topics of theoretical physics, including Lamb shift and H. Bethe's theory for it, pseudoscalar and vector mesotrons, cosmic rays and stellar equilibria, and the scattering of slow mesotrons. Several of the entries for August 1947 pertain to 90 MeV neutron cross sections

Box 43

Folder 3

Notebook D9, "E. Fermi, University of Chicago, Notebook 103, November 30, 1947 - May 25, 1948," index at the end (pp 142-144), 21 x 28cm, 144pp, this Notebook contains notes and calculations on various topics of theoretical physics, including the scattering of particles in emulsions, the charge near a neutron, Schwinger electrodynamics, the scattering of neutral pseudoscalar mesons, and relativistic quantum electrodynamics

Box 43

Folder 4

Notebook D8, "E. Fermi, University of Chicago, Notebook 104, May 26, 1948 - Dec 5, 1948," index at the end (pp 142-144), 21 x 28cm, 144pp, this Notebook contains notes and calculations on various topics of theoretical physics, including Schwinger

electrodynamics, Lamb shift, Majorana neutral particles, the annihilation of positrons, meson theories and β-decay, the expansion of space, and cosmic ray theory

Box 43

Folder 5

Notebook D7, "E. Fermi, University of Chicago, Notebook 105, December 5, 1948 - June 21, 1949," index at the end (pp 118-120), 21 x 28cm, 120pp, this Notebook contains notes and calculations on various topics of theoretical physics, including stellar light, the origin of cosmic rays, interstellar clouds, neutral vector mesons, Feynman quantum mechanics, and quadrupole moments of nuclei

Box 43

Folder 6

Notebook D6, "E. Fermi, University of Chicago, Notebook 106, June 21, 1949 - December 24, 1949," index at the end (pp 118-119), 21 x 28cm, 119pp, this Notebook contains notes and calculations on various topics of theoretical physics, including meson theories, pseudoscalar and pseudovector mesons, scattering of pions, Feynman electrodynamics, and pion decay

Box 43

Folder 7

Notebook D5, "E. Fermi, University of Chicago, Notebook 107, December 24, 1949 - May 3, 1950," index at the end (pp 119-120), 21 x 28cm, 120pp, this Notebook contains notes and calculations on various topics of theoretical physics, including magnetohydro-dynamics, pions as two nucleon systems, meson decay and meson capture, eigenfunctions of various systems, the expansion of the universe, and statistical theory of multiple productions

Box 43

Folder 8

Notebook D4, "E. Fermi, University of Chicago, Notebook 108, May 4, 1950 - November 17, 1950," index at the end (p. 119), 21 x 28cm, 119pp, this Notebook contains notes and calculations on various topics of theoretical physics, including statistical theory of multiple productions, reactions involving pions, and Feynman method (Goldberg on)

Box 43

Folder 9

Notebooks E1 and E2

- Notebook E1, untitled, Chicago, April 21, 1951, to May 16, 1952, partial index at the beginning, 23 x 28cm, 72pp, this Notebook contains notes on experiments relating to the calibration of the Chicago cyclotron and, possibly, notes on the first experiments with the cyclotron (experiments on pion channels and pion scattering). There is a gap in the notes between July 7 and November 8, 1951
- Notebook E2, "MIT 2," Chicago, May 21-22, 1952, to January 17, 1953, partial index at the beginning, 23 x 28cm, 72pp, this Notebook is most likely a laboratory Notebook and possibly is a continuation of E1. It also contains notes and calculations relating to experiments on pion scattering using the cyclotron

Box 44

Folder 1

Notebooks FA and ME

- Notebook FA, untitled, Chicago, September 29, 1951, to May 29, 1952, no index, this Notebook begins on the day of Fermi's 50th birthday, a few days after the Chicago International Conference (September 17-22, 1951) on elementary particles, held to celebrate the inauguration of the Chicago cyclotron. It contains notes on experiments performed with the cyclotron on scattering of pions on hydrogen. The entry for October 16, 1951, records measurements on negative pions; the entries then skip to January 14, 1952. Entries on experiments on positive pions begin on March 5, 1952. A photocopy of the Notebook is in Box 45, Folder 1
- Notebook ME, untitled, Chicago, April 17, 1954, to June 30, 1954, index at the end, this Notebook contains mainly notes on experiments on the scattering of pions. It is irregularly filled, and one of its entries is dated January 26, 1950. It is not known why the dates of this Notebook overlap with the dates of Notebook FA. A photocopy of the Notebook is in Box 45, Folder 1

Box 45
Folder 1

Photocopies of Notebooks FA, ME, and portions of F1 (originals in Box 44, Folder 1, and Box 49, Folder 11)

Box 45
Folder 2

Notebook D3, "E. Fermi, University of Chicago, Notebook 109, November 17, 1950 - May 17, 1952," index at the end (pp 159-160), 20 x 25cm, 160pp, this Notebook contains notes and calculations on various topics of theoretical physics, including Feynman method, the nature of pions, V-particles, decay of neutral pions, and pion-nucleon interaction. It also seems to contain some theory relating to a subsequent period of experimental work following the inauguration of the Chicago cyclotron in September 1951. There is a gap in the entries between April 18, 1951 (pp 64-65), and November 3, 1951 (pp 66-67)

Box 45
Folder 3

Notebook D2, "E. Fermi, University of Chicago, Notebook 110, May 17, 1952 - September 22, 1953," index at the end (pp 159-160), 20 x 25cm, 160pp, this Notebook contains extensive numerical analysis of phase shifts data using the Maniac computer, notes from the Rochester meeting of the American Physical Society (December 1952), and notes and calculations on various topics of theoretical physics, including pion scattering, proton polarization, V-particles, and pion photoeffect

Box 45
Folder 4

Notebook D1, "E. Fermi, University of Chicago, Notebook 111, September 23, 1953 - April 16, 1954," index at the end (pp 161-162, plus back inside cover), 20 x 25cm, 162+pp, this Notebook contains notes from the Rochester meeting of the American Physical Society (December 1952), as well as notes and calculations on various topics of theoretical physics, including pion scattering, strange ("curious") particles, geophysics, decay of neutral pions, proton polarization, and the Bohr-Mottelson nuclear model

Box 45
Folder 5

Notebook D01, "E. Fermi, University of Chicago, Notebook 112, April 16, 1954 - [June 30, 1954]," index at the end (p. 157), this Notebook contains notes and calculations on various topics of theoretical physics, including proton polarization, pion photoeffect, and K-mesons

Subseries 2: Courses

Box 45
Folder 6
Notebook C3, "E. Fermi, Statistical Mechanics, Spring 1941," Columbia University, 17 x 21 cm, contains 24pp notes for a course on statistical mechanics, 24pp, as well as (starting at the back of the book) research notes on "Pauli meson theory," 32pp

Box 45
Folder 7
Notebook C 11, "E. Fermi, Mechanics, Spring 1941," Columbia University, 17 x 20cm, 55pp, contains notes for a course on mechanics, including notes for lectures on classical mechanics of systems with a finite number of degrees of freedom, short elasticity, and hydrodynamics

Box 45
Folder 8
C14, "Geophysics," unbound, 1941 or earlier, Columbia University, 21 x 28cm, 22pp, contains notes for a course on geophysics (possibly Physics 138 at Columbia), including notes for lectures on gravitational effects, earthquakes, atmosphere water, earth's interior, and the electricity of the atmosphere

Box 45
Folder 9
"Fission," 1945, typescript, 41pp, contains notes for weeks 12-14 of a neutron physics course in 1945 (see also Box 46 Folder 1)

Box 46
Folder 1
"Neutron Physics, A Course by E. Fermi, February 5, 1946," Los Alamos University, mimeograph of typescript, bound, 21 x 28cm, 75pp, contains lecture notes from Fermi's course on neutron physics at Los Alamos in 1945. Topics include neutron sources, collisions of neutrons with nuclei, the chart of stable isotopes and what it implies about nuclear reactions involving neutrons, models of nuclei and of nuclear reactions, the scattering of neutrons, the slowing down of neutrons, the distribution of slow neutrons in a medium, and nuclear fission

Box 46
Folder 2
Notebook C7, "Physics 202" and "Physics 242," missing cover, University of Chicago, Summer 1949, 19 x 13cm, 115pp, contains notes for a course on differential equations of classical physics (Physics 202), including notes for lectures on Bessel functions and spherical harmonics, and notes for a course on quantum mechanics (Physics 242)

Box 46
Folder 3
Notebook C13, "The Growth of Physics in the Past Twenty Years," Silliman Lectures, Yale University, April 10, 12, 14, 17, and 19, 1950, 128pp, typescript transcription of

Fermi's 1950 Silliman Lectures, delivered on the same visit to Yale that he gave the lectures which provided the basis for Fermi's Elementary Particles book. Does not contain formulas or slides. See also Notebook C9 (Box 46, Folder 8)

Box 46

Folder 4

Notebooks C1 and C2 Notebook C1, "E. Fermi, University of Chicago, Nuclear Physics I,"Winter 1949, 13 x 20cm, 160pp, contains notes for a course on nuclear physics, similar to the course published as Nuclear Physics: A Course Given by Enrico Fermi at the University of Chicago (Box 46, Folder 5, and Box 52, Folder 9)

- Notebook C2, "E. Fermi, University of Chicago, Nuclear Physics II," Winter 1949, 70pp, an extension of C1, containing notes through December 1950

Box 46

Folder 5

Notebook C16, Nuclear Physics, A Course Given by Enrico Fermi at the University of Chicago, compiled by Jay Orear et al., rev edn, Chicago: University of Chicago,1950, 128pp; also contains manuscript notes from October 1954 for a revised edition of Nuclear Physics, 2pp (the last known physics-related notes in Fermi's hand)

Box 46

Folder 6

Notebook C8, "Enrico Fermi, Physics of Solids (411), Winter 1951," University of Chicago, 21 x 28cm, 150pp, contains notes for a course on solid state physics, including notes for lectures on chemical bond, vibrations, and order-disorder. See also Notebook C17 (Box 46, Folder 7)

Box 46

Folder 7

Notebook C17, "E. Fermi, Univ. of Chicago, Solids," undated, unbound, 12 x 19cm, 38pp, contains notes for a course on solid state physics that is similar to, but less extensive than, the course in Notebook C8

Box 46

Folder 8

Notebook C9, "Elementary Particles, Spring 1951," University of Chicago, unbound, 21 x 28cm, 80pp, contains notes for a course on elementary particles that is similar to the 1950 Silliman Lectures at Yale (Box 46, Folder 3) and to Fermi's Elementary Particles book

Box 46

Folder 9

Notebook C10, "E. Fermi, Physics 351 and 352, Thermodynamics and Statistics, Fall 1951 and Spring 1952," University of Chicago, 21 x 28cm, 75pp, notes for courses on thermodynamics and statistics, including notes for lectures on classical thermodynamics with applications, statistical mechanics with applications to astrophysics, and He II. This Notebook is written to roughly the same degree of completeness as Notebooks C4 and C5 (Box 47, Folders 4-5). The courses bear strong resemblance to Fermi's Thermodynamics and Molecules and Crystals books, though with many added examples

Box 47

Folder 1

Notebook C15, "E. Fermi, Physics 464 - Spring 1953, Elementary Particles," University of Chicago, 21 x 28cm, 58pp, contains notes for a course on elementary particles, including

notes for lectures on types of elementary particles, symmetries, Dirac functions, s-matrix, nucleon-nucleon scattering, asymptotic behavior of phase shift, proton-proton scattering, isotopic spin, pion-nucleon systems, polarization of recoil neutrons, pion photoeffect, quanta as particles, Klein Gordon field, Yukawa interaction, charge independent Yukawa interaction, & Lamb shift. See also Notebook F1 (Box 49, Folder 11)

Box 47
Folder 2

"E. Fermi, Physics 464 - Spring 1953, Elementary Particles," University of Chicago, 21 x 28cm, 58pp, bound photocopy of Notebook C15 (Box 47, Folder 1)

Box 47
Folder 3

Notebook C4, Physics 341-342, University of Chicago, 1954, 21 x 29cm, contains notes for a two-semester course on nonrelativistic quantum mechanics

Box 47
Folder 4

Notebooks C12 and C18, untitled, Spring 1954, 21 x 28cm, 35pp and 50pp respectively, these Notebooks contain notes for lectures on fundamental particles (including on isotopic spin and pion physics) that Fermi delivered at summer schools in Les Houches (France) and Varenna (Italy) in 1954. Notebook C18 is more complete and was taken to Europe and back

Box 47
Folder 5

Notebook C5, "E. Fermi, Physics 341-342, Quantum Mechanics,Winter - Spring 1954," University of Chicago, 21 x 29cm, contains mimeographs of manuscript notes for a two-semester course on quantum mechanics, several manuscript and typescript additions pertaining to the portion of the course on relativity, a class list for the Spring 1954 course, and two reprints, Enrico Fermi, "High Energy Nuclear Events," Progress of Theoretical Physics, 5:4 (1950), and "Angular Distribution of the Pions Produced in High Energy Nuclear Collisions," The Physical Review, 81:5 (1951)

Box 48
Folder 1

"Quantum Mechanics, E. Fermi, Physics 341, Winter 1954," University of Chicago, 21 x 28cm, contains another copy of the course contained in Notebook C5

Box 48
Folder 2

Notebook C6, "E. Fermi, Quantum Mechanics, 1939," University of Chicago, 19 x 24cm, 115 pp, contains notes for a course on quantum mechanics, an early version of the course contained in Notebooks C4 and C5 (Box 46, Folders 3 and 5)

Box 48
Folder 3

Outline for a five-lecture series on general aspects of nuclear physics, typescript with annotations in Fermi's hand, 3pp, undated

Subseries 3: Personal Notes on Physics

Box 48
Folder 4

Notebook E3, untitled, 1950-1954, University of Chicago, 10 x 17cm, a loose-leaf Notebook that contains alphabetized entries on various topics and data relating to the Chicago cyclotron and to the development of early high-speed counting devices. Entries include topics such as energy of activation, pions, and V-particles

Box 49

Folder 1

Notebook N1, "Alcune Teorie Fisiche [Some Theories in Physics]," all entries in Italian, last page bears the date September 27, 1919, 10 x 15cm, 100pp, consists of a collection of notes on several areas of theoretical physics, including "Dinamica Analitica" [Analytical Dynamics], "Irraggiamento" [Theory of Radiation], "Fisica Atomica" [Atomic Physics], and "Radioattività" [Radioactivity]. This Notebook gives insight into the enormous knowledge of physics that Fermi already possessed by age eighteen. It also contains a bibliography of, and notes on, papers he had read. A photocopy of the Notebook is in Box 49, Folder 2

Box 49

Folder 2

Photocopy of Notebook N1 (Box 49, Folder 1)

Box 49

Folder 3

Notebook N2, "General Physics," not dated, postwar University of Chicago period, 13 x 20cm, 1p, contains a one-page list of universal constants

Box 49

Folder 4

Notebook N3, "Quantum Mechanics," not dated, postwar University of Chicago period, partial index at the end, 13 x 20cm, 81pp, contains notes and calculations on various theoretical topics in physics, including quantum mechanics, second quantization, and Dirac electron theory

Box 49

Folder 5

Notebook N4, "Mathematics," not dated, postwar University of Chicago period, no index, 13 x 20cm, 17pp, contains notes and calculations relating to various topics in mathematics, including spherical functions, differential equations, and asymptotic expansions

Box 49

Folder 6

Notebook N5, "Electricity and Magnetism," not dated, postwar University of Chicago period, no index, 13 x 20cm, 3pp, contains notes on various topics in electricity and magnetism, including Maxwell equations in vacuum, electromagnetic moment, and electromagnetic potentials

Box 49

Folder 7

Notebook N6, "Atom and Nucleus," not dated, postwar University of Chicago period, no index, 13 x 20cm, 6pp, contains notes on various topics in electricity and magnetism, including Gamov factors, thermonuclear reactions, and nuclear forces

Box 49

Folder 8

Notebook N7, "Mechanics," not dated, postwar University of Chicago period, no index, 13 x 20cm, 15pp, contains notes on various topics in mechanics, including Hamiltonian principle and Lagrange equations, hydrodynamics equations, and hyperbolic Kepler motion

Box 49

Folder 9

Notebook N8, "Astronomy and Geophysics," not dated, postwar University of Chicago period, no index, 13 x 20cm, 9pp, contains notes on various topics in astronomy and geophysics, including dimensional theory of stellar equilibrium, dimensional theory of equilibrium of white dwarfs, and the solar system

Box 49

Folder 10

Notebook N9, "Group Theory," not dated, postwar University of Chicago period, no index, 13 x 20cm, 8pp, contains notes on various topics in group theory, including transformation groups, equivalence, and abstract groups and their realization

Box 49

Folder 11

F1, "Elementary Particles," September 25, 1951 to Summer 1954, University of Chicago, looseleaf Notebook pages, no binder, key at the front, consists of notes, calculations, and reprints on theories of elementary particles. Some of these notes relate to conversations with other physicists. The numerical codes used to organize this material match the subject headings in the "artificial memory" (series VI, subseries 3)

Subseries 4: Miscellaneous

Box 50

Folder 1

Notebooks S1 and S2, untitled, undated, both contain miscellaneous calculations

Box 50

Folder 2

Notebook S3, "Enrico Fermi, Eckart Hall, University of Chicago," undated, but probably dates back to Fermi's work in Chicago in either 1942-1944 or 1946-1948, contains miscellaneous calculations, possibly in preparation for lectures , undated

Box 50

Folder 3

Notebook S4, "Miscellaneous (see inside), cosmic rays, nuclear structures, E. Fermi, Univ. of Chicago," March 1946 and earlier, 108pp, contains miscellaneous calculations and notes on cosmic rays and nuclear structures

Box 50

Folder 4

Notebook S5, untitled, no date, contains miscellaneous calculations, some of which may be related to neutron diffraction in crystals (which would suggest that the entries date to the years 1946-1948). The Notebook was labeled "kept at home" during some earlier stage in the archiving process

Box 50

Folder 5

Notebook S6, untitled, first page dated November 23, 1941, contains miscellaneous calculations. At the back, there are some notes labeled "Stato patrimoniale ricostruito 1 luglio 1938 [Patrimonial status of Fermi family by July 1, 1938, with further later additions]." These notes give insight into the pre-war state of the financial affairs of the Fermi family

Box 50
Folder 6

Notebook S7, untitled, possibly dates to 1944, contains miscellaneous calculations

Box 50
Folder 7

Notebook S8, untitled, no date, contains miscellaneous calculations, including some that appear to relate to neutron diffraction by oxygen, BeO, Be, etc

Box 50
Folder 8

"Large Cyclotron, Pion Orbits, Direction of asymptotes as a function of momentum and angle of emission, as calculated for E. Fermi by Argonne digital computer," undated, bound typescript with annotations in unknown hand, 21 x 28cm, contains dozens of pages of computer output. For more on this Notebook, see the correspondence between Fermi and Jean Hall (Box 10, Folder 5)

Series VIII: Writings

Series VIII, Writings, contains published and unpublished articles, lectures, and books by Fermi and Fermi et al. It also includes bibliographies of Fermi's writings, books from his personal library, and papers relating to the posthumous publication of his complete works. The material spans the years 1921 to 1955. It is divided into three subseries: 1. Published Articles, Lectures, and Addresses, 2. Unpublished Articles, Lectures, and Addresses, and 3. Books.

Subseries 1, Published Articles, Lectures, and Addresses, consists mainly of reprints of articles by Fermi and Fermi et al., as well as published lectures and addresses by Fermi. These publications are arranged chronologically, spanning the years 1921 to 1955. In addition, various bibliographies of Fermi's writings are located at the start of the subseries, as are several uncorrected galleys and near-print typescripts of articles and lectures by Fermi and Fermi et al. that were later published. Of particular interest in this subseries are copies of three declassified scientific articles by Fermi concerning the first nuclear reactor (Box 52, Folders 9-11).

Subseries 2, Unpublished Articles, Lectures, and Addresses, contains texts of unpublished articles by Fermi, as well as texts of, and notes for, unpublished lectures and addresses that Fermi gave between 1941 and 1954.

Subseries 3, Books, includes materials relating to the posthumous publication of Fermi's Collected Papers and to the abandoned project of translating and revising Fermi's Fisica ad Uso dei Licei for use in American high schools. It also contains several books by Fermi, as well as books from his personal library, many of which contain inscriptions to Fermi and/or marginalia in his hand. One other book from Fermi's personal library, Andrea Carrafa's Elementorum Physicae Mathematicae (Rome, 1840), a book from which Fermi learned physics in the 1910s, is located in Box 5.

Subseries 1: Published Articles, Lectures, and Addresses

Box 51

Folder 1

Bibliographies (see also Box 1, Folder 1, and Box 60, Folders 5-6) "Bibliography - Enrico Fermi," compiled in February 1949, mimeograph of typescript

- "A List of Publications by Enrico Fermi furnished by Argonne National Laboratory and have not appeared in journals," undated, mimeograph of typescript, two copies
- "Publications - Enrico Fermi, November 1, 1953," mimeograph of typescript, three copies
- "Books," typescript, undated
- Indice Degli Atti Accademici Pubblicati dal 1935 al 1950, Rome, Accademia Nazionale dei Lincei, 1953: entry for Fermi on p.52

Box 51

Folder 2

Uncorrected galleys and near-print typescripts of articles and lectures by Fermi and Fermi et al. that were later published

- "Are Mesons Elementary Particles?" E. Fermi and C. N. Yang, undated, mimeograph of typescript, 14pp (see Box 52, Folder 16, for published version)
- "Angular Distribution of the Pion Produced in High Energy Nuclear
- Collisions," Enrico Fermi, undated, mimeograph of typescript (see Box 52, Folder 17, for published version)
- "Angular Distribution of Pions Scattered by Hydrogen," H. L. Anderson, E. Fermi, R. Martin, and D. E. Nagle, undated, typescript, 7pp (see Box 53, Folder 3, for published version)
- "Angular Distribution of Pions Scattered by Hydrogen," H. L. Anderson, E. Fermi, R. Martin, and D. E. Nagle, undated, mimeograph of typescript, 42pp (see Box 53, Folder 3, for published version)
- "Phase Shift Analysis of the Scattering of Negative Pions by Hydrogen," E. Fermi and N. Metropolis, undated, typescript, 12pp (see Box 53, Folder 4, for published version)
- "Phase Shift Analysis of the Scattering of Negative Pions by Hydrogen," E. Fermi and N. Metropolis, undated, mimeograph of typescript, with note "This manuscript has been changed," 11pp (see Box 53, Folder 4, for published version)
- "Phase Shift Analysis of the Scattering of Negative Pions by Hydrogen," E. Fermi, N. Metropolis, and E. Felix Alei, undated, mimeograph of typescript, with note "This manuscript has been changed," 11pp (see Box 53, Folder 4, for published version)
- Uncorrected galleys and near-print typescripts of articles and lectures by Fermi and Fermi et al. that were later published
- "Phase Shift Analysis of the Scattering of Negative Pions by Hydrogen," E. Fermi, N. Metropolis, and E. Felix Alei, copy of typescript, with accompanying correspondence from Nicholas Metropolis, dated November 15, 1954 (see Box 53, Folder 4, for published version)
- "Multiple Production of Pions in Nucleon-Nucleon Collisions at Cosmotron Energies," E. Fermi, undated, mimeograph of typescript, 5pp, two copies (see Box 53, Folder 3, for published version)

- "Erratum to the Paper 'Multiple Production of Pions in Nucleon-Nucleon Collisions at Cosmotron Energies,'" E. Fermi, undated, mimeograph of typescript, 1p
- "Galactic Magnetic Fields and the Origin of the Cosmic Radiation," E. Fermi, carbon copy of typescript of the Russell Lecture, read at the meeting of the American Astronomical Society at Boulder, CO, on August 28, 1953, 7pp (See Box 53, Folder 4, for published version)
- "Physics at Columbia University: the Genesis of the Nuclear Energy Project," E. Fermi, 1955, uncorrected galley, 7pp (see Box 53, Folder 5, for published version)

Box 51
Folder 3

Published articles, lectures, and addresses, 1921

- ["Electrostatics of a Uniform Gravitational Field"] "Sull'elettrostatica di un Campo Gravitazionale Uniforme e sul Peso delle Masse Elettromagnetiche," Enrico Fermi, reprinted from Nuovo Cimento, vol. 22
- ["Dynamics of a Rigid System Electric Charges in Transitory Motion"] "Sulla Dinamica di un Sistema Rigido di Cariche Elettriche in Moto Traslatorio," Enrico Fermi, reprinted from Nuovo Cimento, vol. 22, two copies

Box 51
Folder 4

Published articles, lectures, and addresses, 1922

- "Sopra i fenomeni che avvengono in vicinanza di una linea oraria," Enrico Fermi, reprinted from Accademia Lincei, vol. 31, three copies
- "Correzione di una Grave Discrepanza tra la Teoria delle Masse Elettromagnetiche e la Teoria della Relatività Inerzia e Peso dell'Elettricità," Enrico Fermi, reprinted from Accademia Lincei, vol. 31
- ["X-Rays"] "I Raggi Röntgen," Enrico Fermi, reprinted from Nuovo Cimento, vol. 24

Box 51
Folder 5

Published articles, lectures, and addresses, 1923

- ["Images with Röntgen Rays"] "Formazione di Immagini coi Raggi Röntgen," Enrico Fermi, reprinted from Nuovo Cimento, vol. 25
- ["Change of the Plane of Polarization of Light in a Rotating Medium"] "Sul trascinamento del piano di polarizzazione da parte di un mezzo rotante," Enrico Fermi, reprinted from Accademia Lincei, 32
- ["A Mechanical Normal System is in General Quasi-Ergodic"] "Dimostrazione che in Generale un Sistema Meccanico Normale e Quasi-Eergodico," Enrico Fermi, reprinted from Nuovo Cimento, vol. 25
- ["A Mechanical Normal System is in General Quasi-Ergodic"] "Beweis, dass ein mechanisches Normalsystem im allgemeinen quasi-ergodisch ist," reprinted from Physikalische Zeitschrift, vol. 24
- "Sulla Massa della Radazione in uno Spazio Vuoto," Enrico Fermi and A. Pontremoli, reprinted from Accademia Lincei, vol. 32, four copies
- "Alcuni Teoremi di Maccanica Analitica Importanti per la Teoria dei Quanti," Enrico Fermi, reprinted from Nuovo Cimento, vol. 25, three copies

- ["Electromagnetic Mass"] "Correzione di una Grave Discrepanza tra la Teoria delle Masse Elettromagnetiche e la Teoria della Relatività Inerzia e Peso dell'Elettricità," Enrico Fermi, reprinted from Nuovo Cimento, vol. 25
- ["Adiabatic Invariants of Mechanical Systems"] "Il Principio delle
- Adiabatiche ed I Sistemi che non Ammettono Coordinate Angolari," Enrico Fermi, reprinted from Nuovo Cimento, vol. 25
- "Sul Peso dei Corpi Elastici," Enrico Fermi, reprinted from Reale Accademia Lincei, vol. 14
- "Sopra la Teoria di Stern della Costante Assoluta dell'Entropia di un Gas Perfetto Monoatomico," Enrico Fermi, reprinted from Accademia Lincei, vol. 32, two copies
- ["The Photoelectric Effect"] "Sulla Teoria Statistica di Richardson dell'Effetto Fotoelettrico," Enrico Fermi, reprinted from Nuovo Cimento, vol. 26
- "Generalizzazione del Teorema di Poincaré sopra la non Esistenza di
- Integrali Uniformi di un Sistema di Equazioni Canoniche Normali," Enrico Fermi, reprinted from Nuovo Cimento, vol. 26
- ["Entropy in a Monatomic Gas"] "Sopra la Teoria di Stern della Costante Assoluta dell'Entropia di un Gas Perfetto Monoatomico," Enrico Fermi, reprinted from Accademia Lincei, vol. 32, three copies
- ["Probability of Quantic States"] "Sulla Probabilita degli Stati Quantici," Enrico Fermi, reprinted from Accademia Lincei, vol. 32, four

Box 51

Folder 6

Published articles, lectures, and addresses, 1924

- ["Optical Resonance Reflection and Diffusion"] "Sopra la riflessione e la diffusione di risonanza," Enrico Fermi, reprinted from Accademia Lincei, vol. 33, three copies
- ["The Probability of the Quantum States"] "Über die Walirscheinlichkeit der Quantenzustände," Enrico Fermi, reprinted from Zeitschrift für Physik, No. 29, three copies
- ["The Thermic Equilibrium of Ionization"] "Sull'Equilibrio Termico di Ionizzazione," Enrico Fermi, reprinted from Nuovo Cimento, new series
- ["Quantizing Systems Containing Identical Elements"] "Considerazioni sulla Quantizzazione dei Sistemi che Contengono degli Elementi Identici," Enrico Fermi, reprinted from Nuovo Cimento, new series
- "Berekeningen over de Intensiteiten van Spectraallijnen, "Enrico Fermi, reprinted from Physica, vol. 4, three copies
- ["Shock between Atoms and Ellectrically-Charged Particles"] "Über die Theorie des Stosses zwischen Atomen und elektrisch geladenen Teilchen," Enrico Fermi, reprinted from Zeitschrift für Physik, No. 29, three copies

Box 51

Folder 7

Published articles, lectures, and addresses, 1925

- "Sopra l'urto tra atomi e nuclei di idrogeno, "Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 1, three copies
- "Sopra l'intensita delle righe multiple," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 1, two copies

- "Una relazione tra le constanti delle bande infrarosse delle molecule triatomich, Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 1, three copies
- "Sulla Teoria dell'Urto Tra Atomi e Corpuscoli Elettrici," Enrico Fermi, reprinted from Nuovo Cimento, new series, vol. 1
- "Sui Principii della Teoria dei Quanti," Enrico Fermi, reprinted from Rendiconti delle sedute dell' anno academico, 1923-1924, Università di Roma, series 2, vol. 2
- "Effetto di un campo magnetico alternato sopra la polarizzazione della luce di risonanza," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 1, three copies
- "Sopra la Teoria dei Corpi Solidi," Enrico Fermi, reprinted from Periodico di Matematiche, series 4, vol. 5
- "Ancora dell'effetto di un campo magnetico alternato sopra la polarizzazione della luce di risonanza," Enrico Fermi and F. Rasetti, reprinted from Accademia Lincei, series 6, vol. 2, three copies
- Published articles, lectures, and addresses, 1925
- "Über den Einfluss eines wechselnden magnetischen Feldes auf die Polarisation der Resonanzstrahlung," Enrico Fermi and F. Rasetti, reprinted from Zeitschrift für Physik, No. 33, three copies

Box 51

Folder 8

Published articles, lectures, and addresses, 1926

- "Problemi di Chimica, Nella Fisica dell'Atomo," Enrico Fermi, reprinted from Periodico di Matematiche, series 4, vol. 6
- ["Quantization of the Monatomic Perfect Gas"] "Sulla quantizzazione del gas perfetto monoatomico, "Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 3, three copies
- ["Quantization of the Ideal Monatomic Gas"] "Zur Quantelung des idealen einatomigen Gases," Enrico Fermi, reprinted from Zeitschrift für Physik, No. 36, two copies
- ["Radiation in Intense Magnetic Fields"] "Sopra l'intensita delle righe proibite, nei campi magnetici intensi," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 3, three copies
- ["Adiabatic Invariance and Kinetic Energy in Undulatory Mechanics"] "Il principio delle adiabatiche e la. nozione di forza viva nella nuova meccanica ondulatoria," Enrico Fermi and E. Persico, reprinted from Accademia Lincei, series 6, vol. 4, two copies
- [Wave Mechanics of Collison"] "Zur Wellenmechanik des Stossvorganges, "Enrico Fermi, reprinted from Zeitschrift für Physik, No. 40, three copies
- "Argomenti Pro e Contro la Ipotesi dei Quanti di Luce," Enrico Fermi, reprinted from Nuovo Cimento, vol. 3
- "Sopra l'Elettrone Rotante," Enrico Fermi and Franco Rasetti, reprinted from Nuovo Cimento, vol. 3
- "Quantum Mechanics and the Magnetic Moment of Atoms," Enrico Fermi, reprinted from Nature, vol. 118

Box 51

Folder 9

Published articles, lectures, and addresses, 1927

- ["Measurment of k/h"] "Una misura del rapporto h/k per mezzo della dispersione anomala del tallio," Enrico Fermi and Franco Rasetti, reprinted from Accademia Lincei, series 6, vol. 5, three copies
- "Gli Effetti Elettro e Magnetoottici e le Loro Interpretazioni," Enrico Fermi, reprinted from a publication marking the centennial of Alessandro Volta's death [Mechanism of Emission According to Undulatory Mechanics"] "Sul meccanismo dell'emissione nella meccanica ondulatoria, "Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 5, three copies
- Published articles, lectures, and addresses, 1927
- ["A Statistical Method of Determining Some Atomic Properties"] "Un metodo statistico per la determinazione di alcune proprieta dell'atomo, "Eiirico Fermi, reprinted from Accademia Lincei, series 6, vol. 6, two copies
- ["Measurment of k/h"] "Eine Messung des Verhältnisses h/k durch die anomale Dispersion des Thalliumdampfes," Enrico Fermi and Franco Rasetti, reprinted from Zeitschrift für Physik, No. 43, three copies

Box 51

Folder 10

Published articles, lectures, and addresses, 1928

- ["A Statistical Method of Determining Some Atomic Properties"] "Uber die Anwendung der statistischen Methode auf die Probleme des Atombaues, Enrico Fermi, reprinted from Leipziger Vorträge, three copies
- ["Statistical Deducation of Atomic Properties"] "Sulla deduzione statistica di alcune proprieta dell'atomo. Applicazaione alla teoria del sistema periodico degli elementi," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 7, three copies
- ["Statistical Calculation of the Rydberg Corrections"] "Sulla deduzione statistica di alcune proprieta dell'atomo: Calcolo della correzione di Rydberg per i termini s," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 7, three copies
- ["Statistical Calculation of the Rydberg Corrections"] "Statistische Berechnung der Rydbergkorrektionen der s=Terme," Enrico Fermi, reprinted from Zeitschrift für Physik, No. 49, four copies

Box 51

Folder 11

Published articles, lectures, and addresses, 1929

- ["Quantistic Electrodynamics"] "Sopra l'elettrodinamica quantistica," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 9, two copies
- ["Motion of a Body of Variable Mass"] "Sul moto di un corpo di massa variabile," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 9
- [Quantum Theory of Intereference Fringes"] "Sulla teoria quantistica delle frange di interferenza, "Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 10, three copies
- [Complex 4d Terms of the Helium Molecule"] "Sul complesso 4d della molecola di elio, "Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 10, three copies

Box 51

Folder 12

Published articles, lectures, and addresses, 1930

- ["Doublet Components of the Alkali Metals"] "Über das Intensitätsverhältnis der Dublettkomponenten der Alkalien," Enrico Fermi, reprinted from Zeitschrift für Physik, No. 59, three copies
- ["Magnetic Moments of Atomic Nuclei"] "Über die magnetischen Momente der Atornkerne, "Enrico Fermi, reprinted from Zeitschrift für Physik, No. 60, two copies
- ["Quantistic Electrodynamics"] "Sopra l'elettrodinamica quantistica," Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 12, two copies
- "Atomi e Stelle," Enrico Fermi, report from the 19th meeting of the Italian Society for the Advancement of Science
- ["Modern Physics"] "La Fisica Moderna," Enrico Fermi, reprinted from Nuova Antologia

Box 51

Folder 13

Published articles, lectures, and addresses, 1931-1933

- "Quantum Theory of Radiation", Enrico Fermi, reprinted from Reviews of Modern Physics, vol. 4
- ["Interaction of Two Electrons"] "Über die Wechselwirkung von zwei Elektronen," Enrico Fermi and H. Bethe, reprinted from Zeitschrift für Physik, No. 77
- "Radioattività provacata da bambardamento di neutroni," Enrico Fermi, reprinted from La Ricerca Scientifica, vol. 1
- ["Oscillation and Rotation of the Ammonia Molecule"] "Sulle bande di oscillazione e rotazione dell'ammoniaca, "Enrico Fermi, reprinted from Accademia Lincei, series 6, vol. 16, three copies
- ["Theory of Hyperfine Structure"] "Zur Theorie der Hyperfeinstruktur," Enrico Fermi and Emilio Segrè, reprinted from Zeitschrift für Physik, No. 82
- ["Theory of Beta Rays"] "Tentativo di una teoria dell'emissione dei raggi 'beta,'" Enrico Fermi, reprinted from La Ricerca Scientifica, vol. 2, three copies
- "Azione di sostanze idrogenate sulla radioattività provocata da neutroni," Enrico Fermi, reprinted from La Ricerca Scientifica, vol. 2

Box 52

Folder 1

Published articles, lectures, and addresses, 1934

- "Le Ultime Particelle Constitutive della Materia," Enrico Fermi, reprinted from Scientia
- Five lectures by Enrico Fermi (in Buenos Aires), Science Faculty of the University of Buenos Aires Series B, Publication 15
- "Artificial Radioactivity Produced by Neutron Bombardment," Enrico Fermi, Edoardo Amaldi, O. D'Agostino, Franco Rasetti, and Emilio Segrè, reprinted from Proceedings of the Royal Society of London, vol. 146, four copies
- Published articles, lectures, and addresses, 1934
- ["Theory of Beta Rays"] "Tentativo di una teoria dei raggi beta," Enrico Fermi, reprinted from Nuovo Cimento, vol. 11

Box 52

Folder 2

Published articles, lectures, and addresses, 1935

- "Artificial Radioactivity Produced by Neutron Bombardment--II," Edoardo Amaldi, O. D'Agostino, Enrico Fermi, Bruno Pontecorvo, Franco Rasetti, and Emilio Segrè, reprinted from Proceedings of the Royal Society of London, vol. 149, three copies

Box 52

Folder 3

Published articles, lectures, and addresses, 1936

- ["Absorption of Slow Neutrons"] "SulI'assorbimento dei neutroni lenti," Edoardo Amaldi and Enrico Fermi, reprinted from La Ricerca Scientifica, series 2, vol. 2, two copies
- ["Mean Free Path of Slow Neutrons in Paraffin Wax"] "Sul cammino libero dei neutroni lenti nella paraffina," Edoardo Amaldi and Enrico Fermi, reprinted from La Ricerca Scientifica, series 2, vol. 1
- ["Groups of Slow Neutrons"] "Sui gruppi di neutroni lenti," Edoardo Amaldi and Enrico Fermi, reprinted from La Ricerca Scientifica, series 2, vol. 1
- ["Absorption and Diffusion of Slow Neutrons"] "Sopra I'assorbimento e la diffusione dei neutroni lenti," E. Amaldi and Enrico Fermi, reprinted from La Ricerca Scientifica, series 2, vol. 1, three copies
- ["Motion of Neutrons in Hydrogenous Substances"] "Sul Moto dei Neutroni nelle Sostanze Idrogenate," Enrico Fermi, reprinted from La Ricerca Scientifica, series 2, vol. 2, two copies
- "On the Absorption and the Diffusion of Slow Neutrons," Edoardo Amaldi and Enrico Fermi, reprinted from The Physical Review, vol. 50

Box 52

Folder 4

Published articles, lectures, and addresses, 1937-1938

- "Orso Mario Corbino," Enrico Fermi, reprinted from Nuova Antologia
- "Neutroni lenti e livelli energetici nucleari," Enrico Fermi, reprinted from Nuovo Cimento

Box 52

Folder 5

Nobel Lecture, 1938, "Artificial Radioactivity Produced by Neutron Bombardment," Stockholm: P. A. Norstedt & Sons, 1939, five copies

Box 52

Folder 6

Published articles, lectures, and addresses, 1937-1939

- "Production of Neutrons in Uranium Bombarded by Neutrons," H. L. Anderson, Enrico Fermi and H. B. Hanstein, The Physical Review, vol. 56, two copies
- "Simple Capture of Neutrons by Uranium," H. L. Anderson and Enrico Fermi, reprinted from The Physical Review, vol. 55, three copies
- "Neutron Production and Absorption in Uranium," H. L. Anderson, Enrico Fermi and Leo Szilard, reprinted from The Physical Review, vol. 56, three copies
- Published articles, lectures, and addresses, 1937-1939
- "The Absorption of Mesotrons in Air and in Condensed Materials," Enrico Fermi, reprinted from The Physical Review, vol. 56, three copies

Box 52

Folder 7

Published articles, lectures, and addresses, 1940-1941

- "The Ionization Loss of Energy in Gases and in Condensed Materials, Enrico Fermi, reprinted from The Physical Review, vol. 57
- "Branching Ratios in the Fission of Uranium (235)," H. L. Anderson, Enrico Fermi and A. V. Grosse, reprinted from The Physical Review, vol. 57, two copies

Box 52

Folder 8

Published articles, lectures, and addresses, 1942

- "Neutrons Emitted by a Radium-Beryllium Photosource," B. Feld and Enrico Fermi, U. S. AEC, declassified November 1948

Box 52

Folder 9

Published articles, lectures, and addresses, 1942

- "Neutron Reproduction in a Lattice of Uranium and Graphite," Enrico Fermi, March 17, 1942, declassified January 26, 1954

Box 52

Folder 10

Published articles, lectures, and addresses, 1942

- "Neutron Reproduction in a Lattice of Uranium Oxide and Graphite, Exponential Experiment," by H. L. Anderson, B. Feld, E. Fermi, G. Weil, and W. Zinn, March 26, 1942, declassified January 26, 1954

Box 52

Folder 11

Published articles, lectures, and addresses, 1942

- "Influence of the Lattice Structure on the Exponential Pile Experiment," unattributed, July 7, 1942, declassified February 24, 1954

Box 52

Folder 12

Published articles, lectures, and addresses, 1946

- "The Development of the First Chain Reacting Pile," Enrico Fermi,reprinted from Proceedings of the American Philosophical Society, vol. 90, three copies
- "Elementary Theory of the Pile," Enrico Fermi, U. S. AEC, declassified 1946
- "The Future of Atomic Energy," Enrico Fermi, U. S. AEC, plus photocopy
- "Production of Low Energy Neutrons by Filtering through Graphite," H. L. Anderson, Enrico Fermi, and Leona Marshall, reprinted from The Physical Review, vol. 70

Box 52

Folder 13

Published articles, lectures, and addresses, 1947

- "The Transmission of Slow Neutrons through Microcrystalline Material," Enrico Fermi, W. J. Sturm, and R. G. Sachs, reprinted from The Physical Review, vol. 71, two copies
- "Phase of Scattering of Thermal Neutrons by Aluminum and Strontium," Enrico Fermi and L. Marshall, reprinted from The Physical Review, vol. 71, four copies
- Published articles, lectures, and addresses, 1947
- "Interference Phenomena of Slow Neutrons, "Enrico Fermi and L. Marshall, reprinted from The Physical Review, vol. 71, three copies

- "The Decay of Negative Mesotrons in Matter," Enrico Fermi and Edward Teller, reprinted from The Physical Review, vol. 71, three copies
- "Elementary Theory of the Chain-reacting Pile," Enrico Fermi, reprinted from Science, vol. 105, four copies

Box 52
Folder 14

Published articles, lectures, and addresses, 1947

- "The Capture of Negative Mesotrons in Matter," Enrico Fermi and E. Teller, The Physical Review, vol. 72, four copies
- "Spin Dependence of Scattering of Slow Neutrons by Be, Al, and Bi," Enrico Fermi and L. Marshall, reprinted from The Physical Review, vol. 72, two copies
- "On the Interaction Between Neutrons and Electrons," Enrico Fermi and L. Marshall, reprinted from The Physical Review, vol. 72, three copies
- "A Thermal Neutron Velocity Selector and Its Application to the Measurement of the Cross Section of Boron," Enrico Fermi, J. Marshall, and Leona Marshall, reprinted from The Physical Review, vol. 72
- "Method for Measuring Neutron-Absorption Cross Sections by the Effect on the Reactivity of a Chain-Reacting Pile," H. L. Anderson, E. Fermi, A. Wattenberg, G. L. Weil, and W. H. Zinn, reprinted from The Physical Review, vol. 72, three copies

Box 52
Folder 15

Published articles, lectures, and addresses, 1947

- "Reflection of Neutrons on Mirrors," Enrico Fermi and W. H. Zinn, War Department, Corps of Engineers, Office of the District Engineer, Manhattan District, declassified 1946
- "Reflection of Neutrons on Mirrors," Enrico Fermi and W. H. Zinn, reprinted from Physical Society Cambridge Conference Report, 1947, four copies
- "Production of Low-Energy Neutrons by Filtering through Graphite," Herbert L. Anderson, Enrico Fermi, and Leona Marshall, reprinted from Physical Society Cambridge Conference Report, 1947, two copies
- "Phase of Neutron Scattering," Enrico Fermi and Leona Marshall, War Department, Corps of Engineers, Office of the District Engineer, Manhattan District, declassified 1946
- "Phase of Neutron Scattering, "Enrico Fermi and Leona Marshall, reprinted from Physical Society Cambridge Conference Report, 1947, six copies

Box 52
Folder 16

Published articles, lectures, and addresses, 1949

- "Spin Dependence of Slow Neutron Scattering by Deuterons," Enrico Fermi and L. Marshall, reprinted from The Physical Review, vol. 75, three copies
- "On the Origin of the Cosmic Radiation," Enrico Fermi, reprinted from The Physical Review, vol. 75, three copies
- "An Hypothesis on the Origin of the Cosmic Radiation," Enrico Fermi, reprinted from Nuovo Cimento, series 9, vol. 6
- "Are Mesons Elementary Particles?" Enrico Fermi and C. N. Yang, reprinted from The Physical Review, vol. 76

Box 52
Folder 17
Published articles, lectures, and addresses, 1950-1951
- "High Energy Nuclear Events, "Enrico Fermi, reprinted from Progress of Theoretical Physics, vol. 5, four copies
- "Angular Distribution of the Pion Produced in High Energy Nuclear Collisions," Enrico Fermi, reprinted from The Physical Review, vol. 81, three copies

Box 53
Folder 1
Published articles, lectures, and addresses, 1952
- "Total Cross Sections of Negative Pions in Hydrogen," H. L.Anderson, Enrico Fermi, E. A. Long, R. Martin, and D. E. Nagle, reprinted from The Physical Review, vol. 85, seven copies
- "Total Cross Sections of Positive Pions in Hydrogen," H. L. Anderson, Enrico Fermi, E. A. Long, and D. E. Nagle, reprinted from The Physical Review, vol. 85, four copies
- "Ordinary and Exchange Scattering of Negative Pions by Hydrogen," Enrico Fermi, H. L. Anderson, A. Lundby, D. E. Nagle, and G. B. Yodh, reprinted from The Physical Review, vol. 85, five copies
- "Deuterium Total Cross Sections for Positive and Negative Pions," H. L. Anderson, Enrico Fermi, D. E. Nagle, and G. B. Yodh, reprinted from The Physical Review, vol. 86, four copies
- "Angular Distribution of Pions Scattered by Hydrogen," H. L. Anderson, Enrico Fermi, D. E. Nagle, and G. B. Yodh, reprinted from The Physical Review, vol. 86, five copies
- "Scattering and Capture of Pions by Hydrogen," H. L. Anderson and Enrico Fermi, reprinted from The Physical Review, vol. 86, six copies
- "Experimental Production of a Divergent Chain Reaction," Enrico Fermi, reprinted from American Journal of Physics, vol. 20
- "The Nucleus," Enrico Fermi, Physics Today, vol. 5, pp 6-9

Box 53
Folder 2
Published articles, lectures, and addresses, 1952
- "Numerical Solution of a Minimum Problem," Enrico Fermi and N. Metropolis, Los Alamos Scientific Laboratory, contract W-7405-Eng. 36 with the U. S. AEC

Box 53
Folder 3
Published articles, lectures, and addresses, 1953
- "Angular Distribution of Pions Scattered by Hydrogen," H. L. Anderson, Enrico Fermi, R. Martin, and D. E. Nagle, reprinted from The Physical Review, vol. 91, two copies
- "Nucleon Polarization in Pion Proton Scattering," Enrico Fermi, reprinted from The Physical Review, vol. 91, eight copies
- "Scattering of Negative Pions by Hydrogen," Enrico Fermi, M. Glicksman, R. Martin, and D. Nagle, reprinted from The Physical Review, vol. 91, seventeen copies
- "Multiple Production of Pions in Nucleon-Nucleon Collisions at Cosmotron Energies," Enrico Fermi, reprinted from The Physical Review, vol. 92, five copies, with mimeograph of typescript of corrected tables for the article

- "Problems of Gravitational Stability in the Presence of a Magnetic Field," S. Chandrasekhar and Enrico Fermi, reprinted from The Astrophysical Journal, vol. 118, three copies
- "Magnetic Fields in Spiral Arms," S. Chandrasekhar and Enrico Fermi, reprinted from The Astrophysical Journal, vol. 118

Box 53
Folder 4

Published articles, lectures, and addresses, 1954

- "Galactic Magnetic Fields and the Origin of Cosmic Radiation," Enrico Fermi, reprinted from The Astrophysical Journal, vol. 119, two copies
- "Polarization of High Energy Protons Scattered by Nuclei," Enrico Fermi, reprinted from Nuovo Cimento, vol. 11
- "Multiple Production of Pions in Pion-Nucleon Collisions," Enrico Fermi, reprinted from Anais da Academia Brasileira de Ciencias, vol. 26, three copies
- "Phase Shift Analysis of the Scattering of Negative Pions by Hydrogen," Enrico Fermi, N. Metropolis, and E. Felix Alei, reprinted from The Physical Review, vol. 95, two copies

Box 53
Folder 5

Published articles, lectures, and addresses, 1955

- "Lectures on Pions and Nucleons," Enrico Fermi, edited by B. T. Feld, reprinted from Nuovo Cimento, series 10, vol. 2, two copies
- "From Professor Fermi's Notebooks," H. L. Anderson and Samuel K. Allison, reprinted from Reviews of Modern Physics, vol. 27
- "Physics at Columbia University," Enrico Fermi, Physics Today, vol. 8, pp 12-16, two copies

Box 53
Folder 6

Unpublished or yet to be published articles, 1951-1954

- "Taylor Instability of an Incompressible Liquid," Enrico Fermi, September 4, 1951, copy of typescript, 6pp, two copies
- "Polarization in the Elastic Scattering of High Energy Protons by Nuclei," Enrico Fermi, March 24, 1954, mimeograph of typescript, 3pp
- "Atoms for Peace," Enrico Fermi, April 1954, typescript, 6pp

Box 53
Folder 7

Unpublished or yet to be published articles, undated

- "Quanta of a Field as Particles," unattributed typescript with manuscript revisions in Fermi's hand, irregular pagination, 115pp
- Untitled article on nucleon-nucleon collisions, mimeograph of typescript with manuscript annotations, 7pp

Box 53
Folder 8

Unpublished lectures and addresses, 1941-1947

- Unidentified lecture notes, October 28, 1941, manuscript, 1p

- "Atomic Energy for Peaceful Purposes," Chapter Day Address, Rockford College, February 23, 1947, typescript, 12pp
- "The Future of Nuclear Physics," address on the occasion of the award to Fermi of the Franklin Medal of the Franklin Institute, April 16, 1947, typescript with manuscript revisions, 4pp
- "The Future of Nuclear Physics," address on the occasion of the award to Fermi of the Franklin Medal of the Franklin Institute, April 16, 1947, copy of typescript, 2pp
- Manuscript notes for commencement address at Union College, 1947

Box 53

Folder 9

Unpublished lectures and addresses, 1949

- Dedication speech for the Institute of Radiobiology, Institute of Metals,and the Institute for Nuclear Studies at the University of Chicago, June 21, 1949, typescript, 5pp
- The Donegani Lectures, Rome and Milan, October 1949, typescripts and manuscripts

Box 53

Folder 10

Unpublished lectures and addresses, 1950

- Notes for sponsor's meeting lecture on elementary particles,November 6, 1950, manuscript, 1p. (transparencies for this lecture are located in Box 61, Folder 5)
- "The Growth of Physics in the Past Twenty Years," Silliman Lectures, Yale University, April 1950, photocopy (see Box 46, Folder 3)

Box 53

Folder 11

Unpublished lectures and addresses, 1951

- Notes for "U*Hi Graduation" address, June 15, 1951, typescript, 1p
- Notes for speech on "Fundamental Particles" for the International Conference, Chicago, September 17, 1951, manuscript, 3pp
- Unpublished lectures and addresses, 1951
- Notes for untitled lecture for the Symposium of the American Institute of Physics, Chicago, October 25, 1951, typescript, 2pp
- Notes for a colloquium on "Pion Scattering" at the University of Wisconsin - Madison, October 31, 1951, manuscript, p. 1, with mimeograph copy of tables, 2pp

Box 53

Folder 12

Unpublished lectures and addresses, 1952

- Notes for a lecture on "Synchrocyclotron research at the U of Chicago," Rochester Colloquium, January 7, 1952, manuscript, 3pp
- Notes for a lecture on "The Future of Nuclear Physics" for the American Physical Society meeting in Rochester, NY, January 10, 1952, manuscript, 1p
- Notes for a colloquium on the "Angular distribution of pions scattered by Hydrogen" at the University of Illinois, April 17, 1952, manuscript, 1p
- Notes for a colloquium on "Theoretical implications of cyclotron experiments," May 29, 1952, manuscript, 2pp
- Untitled address to be broadcast on Italian radio, manuscript, 7pp, June 14, 1952,
- Notes for "T-Seminar," September 12, 1952, manuscript, 2pp

- Untitled address to the American Physical Society meeting in St. Louis, MO, November 28, 1952, manuscript, 1p
- Untitled lecture for the American Physical Society meeting in St. Louis, MO, November 28, 1952, manuscript, 1p
- Press release, text of address on the occasion of the "tenth anniversary of the atomic age," University of Chicago, December 2, 1952, 2pp
- Photographic reproduction of the signed and dated typescript text of Fermi's address on the occasion of the "tenth anniversary of the atomic age," University of Chicago, December 2, 1952, 3pp
- Program for, and description of, the Josiah Willard Gibbs lectureship, December 27, 1952

Box 53

Folder 13

Unpublished lectures and addresses, 1953

- Notes for a lecture on "Science in Today's World" for the Sinai Temple Forum, February 10, 1953, typescript with manuscript revisions, 1p
- Notes for an untitled address to the American Academy of Arts and Sciences, March 28, 1953, manuscript, 1p
- Notes for an untitled lecture at Wheaton College, April 1, 1953, typescript, 1p
- Notes for a colloquia series at Brookhaven Laboratory, June 25, 30, and July 2, 1953, manuscript, 4pp
- Unpublished lectures and addresses, 1953
- Notes for the Russell Lecture at the American Astronomical Society meeting in Boulder, CO, August 28, 1953, manuscript, 1p
- Notes for a colloquium on "Multiple Meson Production" at Brookhaven Laboratory, October 1, 1953, manuscript with mimeograph figures, 3pp
- Notes for a lecture on "What is going on in Physics today?" for the students at Haverford College, November 17, 1953, typescript, 1p
- Notes for a lecture on "Recent Results in High Energy Physics" for Haverford College, November 18, 1953, manuscript, 1p., and typescript, 1p
- Notes for an untitled lecture for an astronomy course at Haverford College, November 18, 1953, manuscript, 1p
- Notes for a lecture on "Pion-Hydrogen Scattering" for the American Physical Society meeting in Chicago, November 27, 1953, typescript with manuscript notes, 1p
- Notes for a colloquium on "Galactic Magnetic Fields and the Origin of Cosmic Radiation" at Harvard University, November 30, 1953, manuscript, 1p
- Notes for a lecture on "High Energy Collisions" at Harvard University, December 8, 1953, manuscript, 2pp
- Untitled lecture, December 23, 1953, typescript with manuscript revisions, 2pp, also an Italian translation of the same, 1p

Box 53

Folder 14

Unpublished lectures and addresses, 1954

- Notes for a lecture on "What can we learn with High Energy Accelerators?" for the American Physical Society meeting in New York, January 29, 1954, typescript with manuscript revisions, 1p

- Notes for a lecture on "The Genesis of the Nuclear Energy Project," Columbia Bicentennial, January 30, 1954, typescript with manuscript revisions, 1p
- Notes for a lecture on "What is beyond the Nucleus?" at Northwestern University, February 17, 1954, typescript, 1p
- Notes for an address on the "Past and Future of Atomic Development" to the American College of Physicians, April 7, 1954, typescript and manuscript, 6p
- "Ladies Reservation Card" for Fermi's American College of Physicians address, April 7, 1954

Box 54

Folder 1

Unpublished lectures and addresses, 1954

- "Physics 341-342: Quantum Mechanics, Winter - Spring 1954,"
- University of Chicago, 21 x 29cm staple-bound Notebook containing mimeographs of manuscript notes for lectures for a two-semester course on quantum mechanics (see also Box 47, Folder 5)

Box 54

Folder 2

Unpublished lectures and addresses, undated

- "Fermi, Elettrodinamica," mimeograph with manuscript diagrams and equations, cloth bound, 156pp

Box 54

Folder 3

Unpublished lectures and addresses on the field of nuclear physics in general, undated

- "The Nucleus," typescript with manuscript revisions, 13pp, two copies
- "The Atomic Nucleus," typescript with manuscript revisions, 10pp
- Untitled lecture on the development of nuclear physics, typescript with manuscript revisions and calculations, 36pp
- Notes for an unidentified lecture, typescript, 1p
- Notes for an unidentified lecture, typescript, 1p

Box 54

Folder 4

Unpublished lectures and addresses on atomic energy, undated

- "The Future of Atomic Energy," typescript with manuscript revisions, 14pp
- Untitled Voice of America address, typescript, 2pp, three copies
- Notes for an unidentified lecture, manuscript, 1p

Box 54

Folder 5

Unpublished lectures on the origin of elements and on cosmic rays, undated

- Untitled lecture of cosmic rays, typescript, 8pp
- "Seminar on Cosmic Rays Origin," manuscript, 19pp
- Notes for a lecture on the origin of elements, manuscript, 1p

Box 54

Folder 6

Unpublished lectures on particles and high energy collisions, undated

- Notes for an unidentified lecture, manuscript, 1p
- Notes for an unidentified lecture, manuscript, 3p

- Notes for an unidentified lecture, manuscript, 1p
- Notes for an unidentified lecture, manuscript, 1p
- Notes for an unidentified lecture, manuscript, 1p

Box 54
Folder 7
Unpublished lectures on pion scattering, undated
- Notes for an unidentified lecture, manuscript, 2p

Subseries 3: Books

Box 54
Folder 8
Draft text, with additions and revisions of the translation and revision of Fermi's Fisica ad Uso dei Licei for American secondary schools by Fermi and Warren M. Davis, unfinished. See Box 13, Folder 2, for correspondence relating to the venture

Box 54
Folder 9
Typescript draft, with manuscript corrections, of an unrevised translation of Fermi's Fisica ad Uso dei Licei, Vol. I, Part 1

Box 54
Folder 10
Typescript draft, with manuscript corrections, of an unrevised translation of Fermi's Fisica ad Uso dei Licei, Vol. I, Part 2

Box 55
Folder 1
Typescript draft, with manuscript corrections, of an unrevised translation of Fermi's Fisica ad Uso dei Licei, Vol. II, Part 1

Box 55
Folder 2
Typescript draft, with manuscript corrections, of an unrevised translation of Fermi's Fisica ad Uso dei Licei, Vol. II, Part 2

Box 55
Folder 3
Enrico Fermi, Fisica ad Uso dei Licei, Vol. I, Bologna: Nicola Zanichelli, 1929, 205pp and ix, hardbound

Box 55
Folder 4
Enrico Fermi, Fisica ad Uso dei Licei, Vol. II, Bologna: Nicola Zanichelli, 1929, 238pp and ix, hardbound

Box 55
Folder 5
Enrico Fermi, Fisica ad Uso dei Licei, Vol. I, New Edition, Bologna: Nicola Zanichelli, 1946, 205pp and ix, paperbound

Box 55
Folder 6
Enrico Fermi, Fisica ad Uso dei Licei, Vol. II, New Edition, Bologna: Nicola Zanichelli, 1946, 238pp and ix, paperbound

Box 55
Folder 7
Enrico Fermi and Enrico Persico, Fisica per Istituti Tecnici Commerciali, Bologna: Nicola Zanichelli, 1938, printed paper binding, 310pp and ix

Box 56
Folder 1
Enrico Fermi, Moleküle und Kristalle, Leipzig: Johann Ambrosius Barth, 1938, 234pp and vii, hardbound (German translation of Enrico Fermi, Molecole e Cristalli, Bologna: Nicola Zanichelli, 1934)

Box 56
Folder 2
"Neutron Physics," Enrico Fermi, Los Alamos, declassified in 1946 "Neutron Physics, A Course of Lectures by E. Fermi," notes transcribed by I. Halpern, Los Alamos University, mimeograph

Box 56
Folder 3
Neutron Physics, A Revision of I. Halpern's Notes on E. Fermi's Lectures in 1945, ed. by J. G. Beckerley, Oak Ridge, TN: U. S. AEC, 1948, 96pp paperbound, two copies

Box 56
Folder 4
Enrico Fermi, Nuclear Physics, A Course Given at the University of Chicago, Japanese translation

Box 56
Folder 5
Book from Fermi's library
- d'Achiardi, Giovanni, Guida al Corso di Mineralogia: Mineralogia Generale, 2nd edition, revised, Pisa: Enrico Spoerri, 1915, 543 pp, paperbound, contains 3pp manuscript notes in Fermi's hand
- d'Achiardi, Giovanni, Guida al Corso di Mineralogia: Mineralogia Speciale, Pisa: Enrico Spoerri, 1910, 693pp, paperbound

Box 57
Folder 1
Book from Fermi's library
- d'Achiardi, Giovanni, Guida al Corso di Mineralogia: Mineralogia
- Speciale, Pisa: Enrico Spoerri, 1910, 693pp., paperbound

Box 57
Folder 2
Book from Fermi's library
- Amaldi, Ginestra, and Laura Fermi, Alchimia del Tempo Nostro, Milan:
- Ulricho Hoepli,1936, 222pp., paperbound

Box 57
Folder 3
Book from Fermi's library
- Bauer, Edmund, Introduction a la Theorie des Groups et a ses Applications a la Physique Quantique, Paris: Universitaires de France, 1933, 170pp., paperbound, contains marginalia and 3pp. of manuscript notes in Fermi's hand

Box 57
Folder 4
Book from Fermi's library
- Bethe, H., Quantenmechanik der Ein und Zwei-Elektronenprobleme, Berlin: Julius Springer, 1933, 560pp, paperbound, signed by H. Bethe, contains marginalia and 3pp. manuscript notes in Fermi's hand

Box 57
Folder 5
Book from Fermi's library
- Burzio, Filippo, Complementi di Balistica Esterna, two volumes in one, Ministry of War publication No. 2666, Rome: Istituto Poligrafico dello Stato Libreria, 1934, 329pp., hardbound, signed by Fillipo Burzio

Box 57
Folder 6
Book from Fermi's library
- Carrelli, Antonio, Limiti a Possibilita della Scienza, Bari: Giuseppi Laterza & Figli, 1947, 133pp., paperbound, contains marginalia in Fermi's hand

Box 58
Folder 1
Book from Fermi's library
- Cintolesi, Filippo, Dizionario di Fisica, 2nd edition, Livorno: Raffaello Giusti, 1914, 311pp, paperbound

Box 58
Folder 2
Book from Fermi's library
- Conferenze di Fisica Atomica, Rome: Accademia Nazionale dei Lincei, 1950, 125pp, paperbound, two copies

Box 58
Folder 3
Book from Fermi's library
- Convegno di Fisica Nucleare, Ottobre 1931, Rome: Reale Accademia d'Italia, 1932, Vol. I, 172pp, paperbound with dust jacket

Box 58
Folder 4
Book from Fermi's library
- Debye, P., ed., Elektronen-Interferenzeri, Leipzig: S. Hirzel, 1930, 85pp, paperbound

Box 58
Folder 5
Book from Fermi's library
- Jordan, Pascual, Anschauliche Quantentheorie, Berlin: Julius Springer, 1936, 319pp, hardbound

Box 58
Folder 6
Books from Fermi's library
- Kittel, Charles, Introduction to Solid State Physics, New York: John Wiley & Sons, 1953, 396pp, hardbound

- Perdoni, Torquato, Idraulica, Milan: Ulrico Hoepli, 1897, 392pp, hardbound, signed Enrico Fermi on the cover

Box 58

Folder 7

Book from Fermi's library

- Perrin, Jean, Grains de matiere at de lumiere, Paris: Hermann at Companie, 1935, 156pp, paperbound, signed by Jean Perrin

Box 59

Books from Fermi's library

Box 59

Poisson, S. D., Traite de mecanique, 2nd edition, 2 vols, Paris: Bachelier, 1833, vol. 1: 696pp, vol 2: 782pp, hardbound, inscribed to Fermi by Emilio Segrè

Box 60

Folder 1

Book from Fermi's library

- Schuck, H. and R. Sohlman, eds., Nobel: Dynamit/Petroleum/ Pazifismus, Leipzig: Paul List, 1928, 334pp, hardbound, inscribed to Enrico Fermi by the authors

Box 60

Folder 2

Book from Fermi's library

- von Laue, M., Die Relativitätstheorie, Braunschweig: Druck und Verlag von Freidr Vieweg & Sohn, 1921, 276pp, paperbound,

Box 60

Folder 3

Book from Fermi's library

- Von Laue, M., Theory of Superconductivity, trans. by Lothar Meyer and William Band, New York: Academic Press, 1952, 140pp, hardbound

Box 60

Folder 4

Book from Fermi's library

- Wentzel, Gregor, Wellenmechanik der StoBund Strahlungsvorgänge, Ch. 5 from a book-length work [title page missing]

Box 60

Folder 5

Materials relating to the publication of Fermi's Collected Papers Bibliographies of Fermi's published writings, dated 1949 to 1955

Box 60

Folder 6

Materials relating to the publication of Fermi's Collected Papers "A List of Publications by Enrico Fermi, furnished by Argonne National

- Laboratory, and have not appeared in journals," mimeograph of typescript, two copies, with accompanying correspondence from Marilyn Hastings to Herbert L. Anderson, January 13, 1955

Box 60

Folder 7

Materials relating to the publication of Fermi's Collected Papers "Enrico Fermi: Honors and Awards," 1954, mimeograph of typescript, three copies

- Typescript list of Fermi's honors and awards with manuscript additions in Fermi's hand, undated

Box 60
Folder 8

Materials relating to the publication of Fermi's Collected Papers: Biography of Fermi, 1953 or 1954, mimeograph of typescript, 3pp,two copies

Box 60
Folder 9

Materials relating to the publication of Fermi's Collected Papers: Reprints, 1922-1926

Box 61
Folder 1

Materials relating to the publication of Fermi's Collected Papers: Reprints, 1927-1935

Box 61
Folder 2

Materials relating to the publication of Fermi's Collected Papers: Reprints, 1932-1954

Box 61
Folder 3

Materials relating to the publication of Fermi's Collected Papers: Reprints, 1938-1955

Box 61
Folder 4

Materials relating to the publication of Fermi's Collected Papers: Enrico Fermi, "On the Motion of Neutrons in Hydrogenous

- Substances," trans. by G. M. Tenner from Ricerca Scientifica (Oak Ridge, TN: U. S. AEC, October 22, 1951). Italian original is in Box 52, Folder 3
- Enrico Fermi, "Polarization in the Elastic Scattering of High Energy Protons by Nuclei," March 24, 1954, mimeograph of typescript, 3pp
- "Theory of ⊠-Decay," Enrico Fermi, trans. from the German by B.Sussholz, August 1947, mimeograph of typescript, 26pp

Series IX: Audio-Visual Materials

Series IX, Audio-Visual Materials, consists primarily of visual aids that Fermi used for various lectures and of phonograph recordings of or concerning Fermi. It is divided into two subseries: 1. Visual Materials, and 2. Audio.

Subseries 1, Visual Materials, contains transparencies and slides that Fermi used in various lectures, as well as several "windows," a research-related punched computer tape, and four photographs of different stages in the explosion of a nuclear warhead. The slides remain arranged in the order that Fermi packaged them. Of particular note are slides depicting photographic views, drawings, and diagrams of the first pile and of the Chicago cyclotron.

Subseries 2, Audio, contains phonograph recordings of Fermi's addresses at the University of Rome and at the National Research Council in Rome in October 1949, as well as of Herbert L. Anderson's eulogy for Fermi at the American Physical Society's Fermi Memorial Session in Washington, DC, in April 1955.

Portions of Series IX, Audio-Visual Materials, are currently restricted due to their fragile condition or need for special equipment.

Subseries 1: Visual Materials

Box 61
Folder 5
Transparencies for Fermi's lecture at the Sponsors Meeting, November 6, 1950, Figures 1-13, figures are untitled (notes for this lecture are located in Box 53, Folder 10)

Box 61
Folder 6
Four envelopes from the Linde Air Products Company containing "windows" (these envelopes are inside a larger envelope)

- Envelope labeled "Two Rutile Windows, .460" x 1/10", two faces polished, c-axis 5o perpendicular to faces of window, TiO2": contains one clear disc
- Envelope labeled "Two Spinel Windows, .5" x 1/10", two faces
- polished, one axis perpendicular to faces of window, 11.5% MgO, Balance Al2O3": contains one clear disc
- Envelope labeled "Two Ruby Windows, .5" x 1/10", two faces
- polished, c-axis perpendicular to faces of window, Cr2O3 content 0.7% in boule": contains one red-tinted disc
- Envelope labeled "Two Sapphire Windows, .5" x 1/10", two faces polished, c-axis perpendicular to faces of window, Al2O3": contains one clear disc

Box 61
Folder 7
Carbon copy of computer printout, with annotations in Fermi's hand and accompanying punched computer tape

Box 61
Folder 8
Four individually matted photographs of different stages in the explosion of a nuclear warhead

Box 61
Folder 9
Fermi's indices for his slides

- "Slides listed by No. - Elements alphabetically," manuscript, 5 x 8
- note card
- "Slides," typescript with annotations in manuscript, 1p: some of these
- slides are contained in Box 62, but the index does not match the numbers on the slides

Box 62
Folder Eighteen slides formerly housed in a box labeled "Dev. Before July 1951, NX5V, 4.12, 6/50," listed by title or description and by Fermi's personal identifying codes

- 2, Vertical cross-section of the cyclotron, also labeled #66A-278
- 4, Photographic view of the cyclotron, also #60-244
- 6, Drawing of Fermi pulling the control rod out of the pile, also red-2
- 7, Drawing of the pile, also red-1

- 8, Photographic view of the pile
- 9, Photographic view of the control board of the pile
- 44, Photographic view of the cyclotron, also #WR-154
- Red-3, "Dec 2 1942 Start-Up of First Self-Sustaining Chain Reaction, Neutron Intensity in the Pile as Recorded by a Galvanometer"
- Blue, Diagram of an atomic energy plant
- 75-2, Particle track plate
- 75-3, Particle track plate
- 75-4, Particle track plate
- 75-5, Particle track plate
- 75-6, "Figure 8," Unidentified
- 75-7, "Figure 6," Unidentified
- 75-8, "Successive Decay, 7 ☒ (☒ e, Bristol '48"
- 75-9, Unidentified, also #35
- 75-17, Unidentified, "Obsolete" written across its surface in blue ink

Box 62

Thirteen slides formerly wrapped and labeled "E. Fermi, Proton-neutron diagram of nuclei; Element abundance," listed by title or description and by Fermi's personal identifying codes

- 1, Table of isotopes, also #13
- 2, Table of isotopes
- 3, Table of isotopes
- 4, Table of isotopes, also #17
- 5, Table of isotopes
- 6, Table of isotopes
- 7, Table of isotopes, also #14
- 15, Photographic view of the cyclotron, also #WR-147
- 45, A second photographic view of the cyclotron, also #WR-164
- 45, A third photographic view of the cyclotron, also #WR-166
- 46, "Abundances of elements in meteoritic phases," also #WF-167
- 46, "Abundances... (cont.)," also #WF-168
- 46, "The relative abundance of nuclear species of odd mass number as a function of mass number," also #WF-169
- Eleven slides formerly wrapped and labeled "Pion Scattering": 1, Unidentified graph
- 2, "Total (- P Cross Section (Oct. 6, 1953)"
- 8, "Orear, Lord, & Weaver, (++P Scattering, 45 Mev"
- 12, Unidentified graph
- 13, Unidentified graph
- 75-20, Unidentified graph
- 75-21, Unidentified graph
- 75-26, Unidentified graph
- 75-27, Unidentified graph
- 75-28, Unidentified graph
- 75-36, "118 Mev (+-P Scattering with Coulomb Interference," also #2

Box 62

Seventeen slides formerly wrapped and labeled "E. Fermi, Cyclotron"

- 1, Unidentified graph
- 2, Unidentified figure
- 3, "Multiple Production in Nucleon-Nucleon Collisions"
- 4, "Probability of Antinucleon Formation"
- 5, "(+(->->+++"
- 6, "2N⊠3N+N+2((22nd Approximation)"
- Red, "Figure 2. Spectrum Filtered thru BeO"
- Red, "Table 1. Intensity of Bragg Orders"
- Red, "Table I (cont.)"
- Red, "Figure 1. Apparatus for Measuring Intensity of Bragg Orders"
- Red, "Table 2. Scattering Lengths"
- Slides (in order of their arrangement in the box)
- Seventeen slides formerly wrapped and labeled "E. Fermi, Cyclotron":
- Red, "Table 3. Cross Sections at R=5.1 =o" (shattered)
- Red, "Table 4. Cross Section of H2 at Room Temperature"
- Red, "Figure 3," Unidentified (cracked)
- Red, "Figure 4. Monochromatic total reflection on mirrors"
- Red, "Table 5. Cross Section of CF4"
- Red, "Table 6. Limiting Angles for R=1.873 Ao"

Subseries 2: Audio

Box 63

Phonograph Recordings of and Concerning Fermi

Box 63

Enrico Fermi, "Le Ricerche Scientifiche negli U.S.A.," address delivered at the National Research Council, Rome, October 15, 1949, two albums of two 12", 78 rpm records each

Box 63

Enrico Fermi, "Recenti Progressi in Elettrodinamica quantistica," conclusion of a lecture held under the auspices of the University of Rome, Rome, October 14, 1949, two albums of one 10", 78 rpm record each

Box 63

H. L. Anderson, "Address Given in Honor of Enrico Fermi," American Physical Society, Fermi Memorial Session, Washington, April 29, 1955, one 12", 33 1/3 rpm record in corrugated paper carton