



Pais (Abraham) papers

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Summary Information

Repository:	Rockefeller Archive Center
Creator - aut:	Pais, Abraham
Creator:	Rockefeller University
Title:	Abraham Pais papers, Rockefeller University Faculty
ID:	FA014
Date [inclusive]:	1875-2000
Date [bulk]:	bulk 1936-1998
Physical Description:	35.3 Cubic Feet 96 document cases
Language of the Material:	English

Preferred Citation

Information regarding the Rockefeller Archive Center's preferred elements and forms of citation can be found at <http://www.rockarch.org/research/citations.php>

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Biographical/Historical note

Abraham Pais (1918-2000), a theoretical physicist, was one of the first founders of particle physics. He was Detlev W. Bronk Professor Emeritus at the Rockefeller University. Known for his work with the forces that control particle interaction, including the development of the principle of associated production, Pais was also a noted historian of science. In the latter part of his career Pais became known for his histories of physics, most notably "Inward Bound: Of Matter and Forces in the Physical World," and his biographies of Albert Einstein, "Subtle is the Lord," and Niels Bohr, "Niels Bohr's Times." Professor Pais died on July 28, 2000.

Chronology

May 19, 1918

Born in Amsterdam, The Netherlands to Jesaja and Kaatje Pais.

November 1, 1920	Sister Annie born.
1935	Obtained high school diploma from HBS (Higher Burgher School) in Amsterdam. Began studies at the University of Amsterdam.
1936	Joined the NZSO (Zionist student organization).
Spring 1938	Graduated with two bachelor's degrees in physics and mathematics from the University of Amsterdam. Pais also minored in chemistry and astronomy.
Fall 1938	Enrolled in the University of Utrecht to continue graduate studies under George E. Uhlenbeck and Hendrik Casimir.
July 9, 1941	Awarded PhD. from University of Utrecht.
March 1943	Went into hiding from the Gestapo to avoid deportation.
1945	First publications, in the "Proceedings of the Cambridge Philosophical Society," "Transactions of the Dutch Academy of Sciences," "Physical Review," "Nature" and "Physica."
January 1946	Research fellow to Niels Bohr at the Institute of Theoretical Physics in Copenhagen, Denmark.
September 1946	Came to the Institute for Advanced Study in Princeton, New Jersey. Temporary Member.
1949	Full-time member of the Institute for Advanced Study.
1950	Professor at the Institute for Advanced Study.
1951	Began development of the "principle of associated production."

1955	Visiting professor at Columbia University.
May 1956	Attended the First All-Union Conference on the Physics of Particles at High Energies in Moscow [the first post-war conference with American participation].
December 15, 1956	Married first wife, Lila Atwill. Had one son, Joshua in 1958. Divorced in 1961.
October 1961	Attended the Twelfth Solvay Conference.
1962	Elected a member of the National Academy of Sciences.
1963	Became a professor of physics at the Rockefeller University.
1965	Co-discovered the theory of "particle-mixing" and work with the SU(6) theory.
1976	Married second wife, Sara. Divorced in 1985.
1977	Visiting Professor at the Weizmann Institute in Israel. Named the James Arthur Balfour Professor at the Institute.
1979	Awarded the 11th Annual J. Robert Oppenheimer Memorial Prize.
1981	Named Detlev W. Bronk Professor at the Rockefeller University.
1982	Published "Subtle is the Lord: The Science and the Life of Albert Einstein."
1986	Published "Inward Bound: Of Matter and Forces in the Physical World."
1988	Professor Emeritus at the Rockefeller University.
March 15, 1990	Married Ida Nicolaisen.

1991	Published "Niels Bohr's Times: In Physics, Philosophy, and Polity."
1992	Received the Physics Prize from the Netherlands Physical Society.
1993	Awarded the Medal of Science from the Royal Dutch Academy of Sciences. Received the Germant Award of the American Institute of Physics.
1994	Published "Einstein Lived Here: Essays for the Layman."
1995	Awarded the Lewis Thomas Prize.
1997	Published "A Tale of Two Continents: A Physicists Life in a Turbulent World," his autobiography.
2000	Published "The Genius of Science: A Portrait Gallery of Twentieth Century Physicists."
July 28, 2000	Died from heart failure in Copenhagen, Denmark.

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Scope and Contents

This collection contains correspondence, subject files, photographs, manuscripts, lectures, and biographical material documenting the work of Abraham Pais.

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Arrangement note

The Abraham Pais Papers are arranged in 8 series:

Series 1 - Biographical

Series 2 - Manuscripts

Subseries 1 - Niels Bohr

Subseries 2 - Paul Dirac

Subseries 3 - Albert Einstein

Subseries 4 - Inward Bound

Subseries 5 - A Tale of Two Continents

Subseries 6 - Essays, Articles and Unpublished Manuscripts

Series 3 - Subject Files

Series 4 - Lectures

Series 5 - Correspondence

Series 6 - Notes and Notebooks

Series 7 - Photos

Series 8 - Reprints

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File Plan

Former Classification: I 450 P166

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Administrative Information

Publication Statement

Rockefeller Archive Center

15 Dayton Avenue
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URL: <http://www.rockarch.org>

Conditions Governing Access

Access to this collection is restricted pending permission from Rockefeller University.

Conditions Governing Use

Copies of documents collected from other archives cannot be photocopied.

Processing Information

Processed by Margaret Hogan, December 2005.

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Controlled Access Headings

- Nuclear physics
- Physics
- Quantum theory
- Statistical physics
- Unified field theories
- Field theory (Physics)
- Strong interactions (Nuclear physics)

Collection Inventory

Biographical, 1934-2000

Physical Description: 0.4 Cubic Feet

Arrangement note

Arranged alphabetically.

Scope and Contents note

This series includes a bibliography of Abraham Pais and assorted biographical sources. It also includes printed biographical material on his widow, a wedding guest book, and assorted personal papers including passports and World War II identification papers.

Title/Description	Instances	
Biographies and Bibliographies	box 1	folder 1
A Celebration of the Life of Abraham Pais, [September 13, 2000]	box 1	folder 2
Driving Permits and Related Documents, [1956-1957]	box 1	folder 3
Ida Nicolaisen, 1989-1999	box 1	folder 4
Ida Nicolaisen, 1991-1997	box 1	folder 5
Old Passports, 1947-1987	box 1	folder 6
Pais, A. - Personal, 1942-1982	box 1	folder 7
Pais, A. - Personal, December 1949-March 1952	box 1	folder 8
Personal Varia, 1954-1998	box 1	folder 9
<u>Conditions Governing Access:</u>		
Conditions Governing Access		
Restricted from scholarly access.		
Rockefeller University - "News & Notes", [2000]	box 1	folder 10
Varia, 1955-1983	box 1	folder 11
War - Personal Documents, 1934-1992	box 2	folder 1
Wedding Guest Book, undated	box 2	folder 2

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Manuscripts, 1875-2000

Physical Description: 8.5 Cubic Feet

Arrangement

This series is arranged into 6 subseries:

Subseries 1 - Niels Bohr

Subseries 2 - Paul Dirac

Subseries 3 - Albert Einstein

Subseries 4 - "Inward Bound"

Subseries 5 - "A Tale of Two Continents"

Subseries 6 - Essays, Articles and Unpublished Manuscripts

The material in each subseries is arranged by format and alphabetically.

Scope and Contents

This series consists of reference notes, manuscripts, and publication materials related to the 5 books published by Abraham Pais: biographies of Niels Bohr, Paul Dirac, and Albert Einstein; "Inward Bound;" and "A Tale of Two Continents." There are also essays, articles and unpublished manuscripts, found in Subseries 6.

Niels Bohr, 1912-2000

Arrangement note

The material in this subseries is arranged by format and alphabetically.

Scope and Contents note

The materials for this book are broken down in order of the publication process, beginning with Reference notes that include material collected on the subject matter such as handwritten notes, newspaper and journal articles, as well as copies of book chapters and other related archival material depending on the subject. This is followed by the Manuscripts which include both handwritten and typed drafts of chapters of the different books. The last section is Publication and this includes primarily correspondence with the publishers, edits to the books, copies of the book covers and reviews of the books.

Title/Description	Instances	
NB Biographical, undated	box 2	folder 3
NB Biographical, undated	box 2	folder 4
NB Bibliography, undated	box 2	folder 5
Interviews with NB, 1959-1962	box 2	folder 6
NB Interviews, 1962-1964	box 3	folder 1
[Niels Bohr Reminiscences], [1961-1963, 1983]	box 3	folder 2
[Reminiscences about] Niels Bohr, undated	box 3	folder 3
Reference Notes - [Bohr Correspondence with E. Rutherford], 1912-1934, 1937	box 3	folder 4
Reference Notes - Niels Bohr - [Unpublished Manuscript] "beta-Ray Spectra and Energy Conservation", 1929	box 3	folder 5
Reference Notes - Harold Höffding, 1931-1932	box 3	folder 6
Reference Notes - Niels Bohr Unpublished Manuscripts, 1932-1937, 1954-1962	box 3	folder 7
Reference Notes - Festschrift til Professor Niels Bohr, October 7, 1935	box 3	folder 8
Reference Notes - Bohr Stuff, 1937, 1957, 1966	box 3	folder 9
Reference Notes - Bohr Stuff, 1982-1986	box 3	folder 10

Reference Notes - [Correspondence with Hendrik Kramers], [1942]	box 4	folder 1
Reference Notes - Aage's Memorandum - Washington, D.C., July 1945	box 4	folder 2
Reference Notes - [Pais Correspondence with Aage Bohr], [1946]	box 4	folder 3
Reference Notes - Bohr Correspondence, 1946, 1958	box 4	folder 4
Reference Notes - Politics, Postwar and Open Letter, 1948-1966, 1989	box 4	folder 5
Reference Notes - [Bohr Correspondence with W. Pauli], [1950, 1955]	box 4	folder 6
Reference Notes - [Miscellaneous Loose Manuscripts about Niels Bohr], [1954-1963, 1983]	box 4	folder 7
Reference Notes - Niels' Saga, October 1955	box 4	folder 8
Reference Notes - [Copy of Letter from Niels Bohr to United Nations], [1956]	box 4	folder 9
Reference Notes - [Excerpts from Books on Felix Frankfurter], [1965-1974]	box 4	folder 10
Reference Notes - War, Postdocs, 1968-1979	box 4	folder 11
Manuscript Drafts - [Opening Pages, Table of Contents, To the Reader], undated	box 4	folder 12
Manuscript Drafts - [Chapter 1: Themes], undated	box 4	folder 13
Manuscript Drafts - [Chapter 2: In Denmark I was born....], undated	box 4	folder 14
Manuscript Drafts - [Chapter 3: Boyhood], undated	box 4	folder 15
Manuscript Drafts - [Chapter 4: Toward the Twentieth Century....], undated	box 4	folder 16
Manuscript Drafts - [Chapter 5: Natura facit saltum], undated	box 4	folder 17
Manuscript Drafts - [Chapter 6: Student Days], undated	box 5	folder 1
Manuscript Drafts - [Chapter 7: In which Bohr goes to England....], undated	box 5	folder 2
Manuscript Drafts - [Chapter 8: Bohr, father of the atom], undated	box 5	folder 3
Manuscript Drafts - [Chapter 9: How Bohr secured his permanent base of operations], undated	box 5	folder 4
Manuscript Drafts - [Chapter 10: Mathematics in physics], undated	box 5	folder 5
Manuscript Drafts - [Chapter 11: Bohr and Einstein], undated	box 5	folder 6

Manuscript Drafts - [Chapter 12: A modern Viking who comes on a great errand], undated	box 5	folder 7
Manuscript Drafts - [Chapter 13: Then the whole picture changes completely....], undated	box 5	folder 8
Manuscript Drafts - [Chapter 14: The Spirit of Copenhagen], undated	box 5	folder 9
Manuscript Drafts - [Chapter 15: Looking into the atomic nucleus], undated	box 5	folder 10
Manuscript Drafts - [Chapter 16: Toward the edge of physics in the Bohr style, and a bit beyond], undated	box 6	folder 1
Manuscript Drafts - [Chapter 17: How Bohr orchestrated experimental progress in the thirties, in physics and biology], undated	box 6	folder 2
Manuscript Drafts - [Chapter 18: Of sad events and of major journeys], undated	box 6	folder 3
Manuscript Drafts - [Chapter 19: We are suspended in language], undated	box 6	folder 4
Manuscript Drafts - [Chapter 20: Fission], undated	box 6	folder 5
Manuscript Drafts - [Chapter 21: Bohr, pioneer of "glasnost"], undated	box 6	folder 6
Manuscript Drafts - [Chapter 22: In which Bohr moves full steam ahead into his later years], undated	box 6	folder 7
Manuscript Drafts - [Chapter 23: Epilog], undated	box 6	folder 8
Manuscript Drafts - [A chronology], undated	box 6	folder 9
Publication - Illustrations, undated	box 6	folder 10
Publication - A. P. Sloan (N.B.), 1987-2000	box 6	folder 11
Publication - Random House, 1988-1990	box 7	folder 1
Publication - Niels Bohr - OUP [Oxford University Press] Contract and Subsequent Correspondence, 1990-1995	box 7	folder 2
Publication - NB's Times, 1991-1998	box 7	folder 3

Paul Dirac, 1935-1996

Arrangement note

The material in this subseries is arranged by format and alphabetically.

Scope and Contents note

The materials for this book are broken down in order of the publication process, beginning with Reference notes that include material collected on the subject matter such as handwritten notes, newspaper and journal articles, as well as copies of book chapters and other related archival material depending on the subject. This is followed by the Manuscripts which include both handwritten and typed drafts of chapters of the different books. The last

section is Publication and this includes primarily correspondence with the publishers, edits to the books, copies of the book covers and reviews of the books.

Title/Description	Instances	
Reference Notes, 1978-1996	box 7	folder 4
Dirac Reprints, 1935-1952	box 7	folder 5
Dirac Reprints, 1953-1963	box 7	folder 6
Dirac Reprints, 1964-1984	box 7	folder 7
Changes for Manuscript, undated	box 7	folder 8
Photographs and Slides, undated	box 7	folder 9

Albert Einstein, 1875-1999

Arrangement note

The material in this subseries is arranged by format and alphabetically.

Scope and Contents note

The materials for this book are broken down in order of the publication process, beginning with Reference notes that include material collected on the subject matter such as handwritten notes, newspaper and journal articles, as well as copies of book chapters and other related archival material depending on the subject. This is followed by the Manuscripts which include both handwritten and typed drafts of chapters of the different books. The last section is Publication and this includes primarily correspondence with the publishers, edits to the books, copies of the book covers and reviews of the books.

Manuscript material for Chapters 26-28 was not in the collection.

Title/Description	Instances	
Albert Einstein Biographical, 1875-1948	box 8	folder 1
Albert Einstein Biographical, 1950-1979	box 8	folder 2
Albert Einstein Biographical, 1980-1982, n.d.	box 8	folder 3
Reference Notes - Post Scripta, 1879-1981	box 8	folder 4
Reference Notes - Post Scripta, 1982-1985, n.d.	box 8	folder 5
Reference Notes - [Xerox of Einstein Certificate], [1902]	box 8	folder 6
Reference Notes, 1904, 1927, 1972, 1979	box 8	folder 7
Reference Notes - AE Papers, 1905-1906, 1921-1950, 1981	box 8	folder 8
Reference Notes - AE Letters, 1905-1955, 1972-1979	box 9	folder 1
Reference Notes - Bose-Einstein Stat, 1924-1938, 1953-1978	box 9	folder 2
Reference Notes - Einstein IAS [Institute for Advanced Study] Files, 1932-1954	box 9	folder 3
Reference Notes - Dukas/Nathan, 1955, 1977-1982	box 9	folder 4

Reference Notes - De Broglie, Einstein and the Birth of the Matter Wave Concept, 1978, 1988	box 9	folder 5
Reference Notes - F.B.I. Einstein File, 1981, 1983	box 9	folder 6
Reference Notes - Dukas Testament, 1982	box 9	folder 7
Manuscript - First Thoughts, undated	box 9	folder 8
Manuscript - Title Page and Preface, undated	box 9	folder 9
Manuscript - To the Reader, undated	box 9	folder 10
Manuscript - Chapter 1 - Purpose and Plan, undated	box 9	folder 11
Manuscript - Chapter 1 - Purpose and Plan, undated	box 9	folder 12
Manuscript - Chapter 2 - New Kinds of Rays, undated	box 10	folder 1
Manuscript - Chapter 3 - Portrait of a Physicist as a Young Man, undated	box 10	folder 2
Manuscript - Chapter 4 - Of Molecules and Entropy and Many Other Things, undated	box 10	folder 3
Manuscript - Chapter 5 - The Reality of Molecules, undated	box 10	folder 4
Manuscript - Chapter 6 - "Subtle is the Lord....", undated	box 10	folder 5
Manuscript - Chapter 7 - The New Kinematics, undated	box 10	folder 6
Manuscript - Chapter 8 - The Edge of History, undated	box 10	folder 7
Manuscript - Chapter 9 - Relativity, the General Theory, undated	box 10	folder 8
Manuscript - Chapter 10 - Herr Professor Einstein, undated	box 10	folder 9
Manuscript - Chapter 11 - The Prague Papers, undated	box 10	folder 10
Manuscript - Chapter 12 - The Einstein-Grossman Collaboration, undated	box 10	folder 11
Manuscript - Chapter 13 - Field Theories of Gravitation: the First Fifty Years, undated	box 10	folder 12
Manuscript - Chapter 14 - The Field Equations of Gravitation, undated	box 11	folder 1
Manuscript - Chapter 15 - The New Dynamics, undated	box 11	folder 2
Manuscript - Chapter 16 - The Suddenly Famous Doctor Einstein, undated	box 11	folder 3
Manuscript - Chapter 17 - Unified Field Theory, undated	box 11	folder 4
Manuscript - Chapter 18 - Preliminaries, undated	box 11	folder 5
Manuscript - Chapter 19 - The Light Quantum, undated	box 11	folder 6
Manuscript - Chapter 20 - Einstein and Specific Heats, undated	box 11	folder 7
Manuscript - Chapter 21 - The Photon, undated		

	box 11	folder 8
Manuscript - Chapter 22 - Interlude: The BKS Proposal, undated	box 11	folder 9
Manuscript - Chapter 23 - A Loss of Identity: the Birth of Quantum Statistics, undated	box 11	folder 10
Manuscript - Chapter 24 - Einstein as a Transitional Figure: The Birth of Wave Mechanics, undated	box 11	folder 11
Manuscript - Chapter 25 - Einstein's Response to the New Dynamics, undated	box 11	folder 12
Manuscript - Chapter 29 - Of Tensors and a Hearing Aid and Many Other Things: Einstein's Collaborators, undated	box 11	folder 13
Manuscript - Chapter 30 - How Einstein Got the Nobel Prize, undated	box 11	folder 14
Manuscript - "Einstein Lived Here" - Chapters 9 & 10, undated	box 11	folder 15
Manuscript - "Einstein Lived Here" - Chapter 11: Einstein and the Jews, undated	box 12	folder 1
Manuscript - Albert Einstein Centennial, 1977-1979	box 12	folder 2
Manuscript - Albert Einstein Centennial, 1977-1979	box 12	folder 3
Manuscript - Albert Einstein Centennial, 1977-1979	box 12	folder 4
Manuscript - "Physics Today", August 1994	box 12	folder 5
Publication - Einstein RMP, 1978-1979	box 12	folder 6
Publication - Permissions, 1979-1982	box 12	folder 7
Publication - OUP [Oxford University Press] - Dr. Pais, 1980-1982	box 12	folder 8
Publication - OUP [Oxford University Press], 1980-1985	box 12	folder 9
Publication - "S. is the L." Letters, 1980-1985	box 12	folder 10

Scope and Contents note

"Subtle is the Lord"

Publication - "Subtle is the Lord", 1982-1984	box 12	folder 11
Publication - "Subtle is the Lord" Reviews, 1982-1985	box 13	folder 1
Publication - AE Corrections, 1982-1986	box 13	folder 2
Publication - Russian Translation, 1984-1990	box 13	folder 3
Publication - German Translation, 1985-1988	box 13	folder 4
Publication - Italian and Brazilian Translation, 1985-1990, 1999	box 13	folder 5
Publication - French Translation, 1985-1999	box 13	folder 6
Publication - Japanese Translation, 1986-1987, 1990	box 13	folder 7

Publication - Chinese Translation, 1986-1990, 1999	box 13	folder 8
Publication - French Translation, 1988, 1992-1993	box 13	folder 9
Publication - Serbo-Croatian Translation, 1993	box 13	folder 10
Publication - Einstein Lived Here - Translations, 1994-1996	box 13	folder 11
Publication - Einstein Lived Here, 1994-1997	box 13	folder 12

"Inward Bound", 1897-1988

Arrangement note

The material in this subseries is arranged by format and alphabetically.

Scope and Contents note

The materials for this book are broken down in order of the publication process, beginning with Reference notes that include material collected on the subject matter such as handwritten notes, newspaper and journal articles, as well as copies of book chapters and other related archival material depending on the subject. This is followed by the Manuscripts which include both handwritten and typed drafts of chapters of the different books. The last section is Publication and this includes primarily correspondence with the publishers, edits to the books, copies of the book covers and reviews of the books.

Manuscript material for Chapters 5, 7, 13, and 17 was not in the collection.

Title/Description	Instances	
Reference Notes - Research Correspondence [Publication Dates: 1905-1984], 1983-1984	box 13	folder 13
Reference Notes - Chapter 1 - Purpose and Plan, undated	box 13	folder 14
Reference Notes - Chapter 2 - New Kinds of Rays: Part (a) Roentgen, undated	box 13	folder 15
Reference Notes - Chapter 2 - New Kinds of Rays: Part (b) Becquerel, undated	box 13	folder 16
Reference Notes - Chapter 3 - From Uranic Rays to Radioactivity; Part (a) The Curies, undated	box 14	folder 1
Reference Notes - Chapter 3 - From Uranic Rays to Radioactivity; Part (b) Rutherford, undated	box 14	folder 2
Reference Notes - Chapter 4 - The First Particle, undated	box 14	folder 3
Reference Notes - Chapter 4 - The First Particle, undated	box 14	folder 4
Reference Notes - Chapter 6 - Radioactivity's Three Early Puzzles, undated	box 14	folder 5
Reference Notes - Chapter 8 - beta-Spectra, 1907-1914, undated	box 14	folder 6
Reference Notes - Chapter 9 - Atomic Structure and Spectral Lines, undated	box 14	folder 7
Reference Notes - Chapter 9 - Atomic Structure and Spectral Lines, undated	box 14	folder 8

Reference Notes - Chapter 9 - Atomic Structure and Spectral Lines, undated	box 15	folder 1
Reference Notes - Chapter 10 - 'It was the epoch of belief, it was the epoch of incredulity', undated	box 15	folder 2
Reference Notes - Chapter 11 - Nuclear Physics' Tender Age, undated	box 15	folder 3
Reference Notes - Chapter 12 - Quantum Mechanics, An Essay, undated	box 15	folder 4
Reference Notes - Chapter 14 - Nuclear Physics, the Age of Paradox, undated	box 15	folder 5
Reference Notes - Chapter 14 - Nuclear Physics, the Age of Paradox, undated	box 15	folder 6
Reference Notes - Chapter 14 - Nuclear Physics, the Age of Paradox, undated	box 15	folder 7
Reference Notes - Chapter 15 - Quantum Fields, or How Particles Are Made and How They Disappear, undated	box 15	folder 8
Reference Notes - Chapter 16 - Battling the Infinite, undated	box 16	folder 1
Reference Notes - Chapter 16 - Battling the Infinite, undated	box 16	folder 2
Reference Notes - Chapter 16 - Battling the Infinite, undated	box 16	folder 3
Reference Notes - Chapter 16 - Battling the Infinite; Part (d) Quantum Electrodynamics in the Thirties, undated	box 16	folder 4
Reference Notes - Chapter 16 - Battling the Infinite; Part (d) Quantum Electrodynamics in the Thirties, undated	box 16	folder 5
Reference Notes - Chapter 18 - Of Quantum Electrodynamics' Triumphs and Limitations and of a New Particle's Sobering Impact; Part (a) Shelter Island, undated	box 16	folder 6
Reference Notes - Chapter 18 - Of Quantum Electrodynamics' Triumphs and Limitations and of a New Particle's Sobering Impact; Part (b) Muons, undated	box 17	folder 1
Reference Notes - Chapter 18 - Of Quantum Electrodynamics' Triumphs and Limitations and of a New Particle's Sobering Impact; Part (b) Muons, undated	box 17	folder 2
Reference Notes - Chapter 18 - Of Quantum Electrodynamics' Triumphs and Limitations and of a New Particle's Sobering Impact; Part (b) Muons, undated	box 17	folder 3
Reference Notes - Chapter 19 - In Which Particle Physics Enters the Era of Big Machines and Big Detectors and Pion Physics Goes Through Ups and Downs, undated	box 17	folder 4
Reference Notes - Chapter 19 - In Which Particle Physics Enters the Era of Big Machines and Big Detectors and Pion Physics Goes Through Ups and Downs, undated	box 17	folder 5

Reference Notes - Chapter 20 - Onset of an Era: New Forms of Matter Appear, Old Symmetries Crumble, undated	box 17	folder 6
Reference Notes - Chapter 20 - Onset of an Era: New Forms of Matter Appear, Old Symmetries Crumble, undated	box 18	folder 1
Reference Notes - Chapter 20 - Onset of an Era: New Forms of Matter Appear, Old Symmetries Crumble, undated	box 18	folder 2
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, undated	box 18	folder 3
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, undated	box 18	folder 4
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, undated	box 18	folder 5
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, undated	box 18	folder 6
Manuscript - Master Copy - A History of Elementary Particles [Original Version of "Inward Bound"], undated	box 19	folder 1
Manuscript - Master Copy - A History of Elementary Particles [Original Version of "Inward Bound"], undated	box 19	folder 2
Manuscript - Chapter 3 - From Uranic Rays to Radioactivity, undated	box 19	folder 3
Manuscript - Chapter 4 - The First Particle, undated	box 19	folder 4
Manuscript - Chapter 5 - Earliest Physiological Discoveries, undated	box 19	folder 5
Manuscript - Chapter 6 - Radioactivity's Three Early Puzzles, undated	box 19	folder 6
Manuscript - Chapter 7 - Pitfalls of Simplicity, undated	box 19	folder 7
Manuscript - Chapter 8 - beta-Spectra, 1907-1914, undated	box 19	folder 8
Manuscript - Chapter 9 - Atomic Structure and Spectral Lines, undated	box 19	folder 9
Manuscript - Chapter 10 - 'It was the epoch of belief, it was the epoch of incredulity', undated	box 19	folder 10
Manuscript - Chapter 11 - Nuclear Physics' Tender Age, undated	box 19	folder 11
Manuscript - Chapter 11 - Nuclear Physics' Tender Age, undated	box 20	folder 1
Manuscript - Chapter 11 - Nuclear Physics' Tender Age, undated	box 20	folder 2
Manuscript - Chapter 12 - Quantum Mechanics, An Essay, undated	box 20	folder 3
Manuscript - Chapter 13 - First Encounters with Symmetry and Invariance, undated	box 20	folder 4

Manuscript - Chapter 14 - Nuclear Physics, the Age of Paradox, undated	box 20	folder 5
Manuscript - Chapter 15 - Quantum Fields, or How Particles are Made and How They Disappear, undated	box 20	folder 6
Manuscript - Chapter 16 - Battling the Infinite, undated	box 20	folder 7
Manuscript - Chapter 17 - In Which the Nucleus Acquires a New Constituent, Loses an Old One, Reveals New Forces with New Symmetries, and is Explored by New Experimental Methods, undated	box 20	folder 8
Manuscript - Chapter 18 - Of Quantum Electrodynamics' Triumphs and Limitations and of a New Particle's Sobering Impact, undated	box 20	folder 9
Manuscript - Chapter 19 - In Which Particle Physics Enters the Era of Big Machines and Big Detectors and Pion Physics Goes Through Ups and Downs, undated	box 21	folder 1
Manuscript - Chapter 19 - In Which Particle Physics Enters the Era of Big Machines and Big Detectors and Pion Physics Goes Through Ups and Downs, undated	box 21	folder 2
Manuscript - Chapter 20 - Onset of An Era: New Forms of Matter Appear, Old Symmetries Crumble, undated	box 21	folder 3
Manuscript - Chapter 20 - Onset of An Era: New Forms of Matter Appear, Old Symmetries Crumble, undated	box 21	folder 4
Manuscript - Chapter 21 - Quantum Field Theory Redux/Essays on Modern Times, 1960-1983, undated	box 21	folder 5
Manuscript - Chapter 21 - Essays on Modern Times, 1960-1983, undated	box 21	folder 6
Manuscript - Chapter 22 - Being a Conclusion that Begins [Starts] as Epilog and Ends as Prolog, undated	box 21	folder 7
Publication - Post-I.B. ["Inward Bound"], [1931-1961], 1986-1988	box 21	folder 8
Publication - Book 2, 1980-1984	box 21	folder 9
Publication - "Inward Bound", [1897-1978], 1981-1989	box 21	folder 10
Publication - "Inward Bound", [1897-1978], 1981-1989	box 22	folder 1
Publication - I.B. ["Inward Bound"] Errata, 1986-1988	box 22	folder 2

"A Tale of Two Continents", 1942-1998

Arrangement note

The material in this subseries is arranged by format and alphabetically.

Scope and Contents note

The materials for this book are broken down in order of the publication process, beginning with Reference notes that include material collected on the subject matter such as handwritten notes, newspaper and journal articles, as well as copies of book chapters and other related archival material depending on the subject. This is followed by the Manuscripts which include both handwritten and typed drafts of chapters of the different books. The last section is Publication and this includes primary correspondence with the publishers, edits to the book, copies of the book covers and reviews of the books.

Of special note in this subseries is a folder of original Dutch newspapers from 1945 to the immediate post-war period. Archival copies have been made, and the originals have been moved into a separate box at the end of the collection.

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Essays, Articles and Unpublished Manuscripts, 1859-2001

Arrangement note

The materials in this subseries are arranged alphabetically.

Scope and Contents note

This subseries consists of essays, articles and unpublished manuscripts.

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Subject Files, 1895-1999

Physical Description: 5.4 Cubic Feet

Arrangement note

Arranged alphabetically.

Scope and Contents note

This series contains primarily material collected on various subjects such as unified field theory, statistical physics and quantum theory. This includes copies of articles, newspaper clippings, some correspondence and some archival material from other collections. Some of this material was most likely used as a reference source for various articles and essays published by Pais. This series also contains conference-related material such as the Kyoto International Symposium in 1985 and the Conference on Ludwig Boltzmann in 1983. There are also some biographical materials on various physicists including Freeman Dyson, Richard Feynman and C. N. Yang. Additionally, there are faculty and personal materials from the Institute for Advanced Study, Rockefeller University and Pais' 70th birthday celebration at the Rockefeller University.

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Conditions Governing Access

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Lectures, 1945-1996

Physical Description: 0.5 Cubic Feet

Arrangement note

Arranged alphabetically.

Scope and Contents note

This series contains handwritten and typed copies of lectures presented by Pais. The series also includes some lecture related correspondence and advertisements for the lectures.

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Correspondence, 1941-2000

Physical Description: 1.7 Cubic Feet

Arrangement note

Arranged alphabetically.

Scope and Contents note

This series contains both personal and professional correspondence, both typed and handwritten. Some correspondents include Niels Bohr, the CERN facility, Helen Dukas, the Institute of Advanced Study, Hans Kramers, the National Academy of Sciences, George Uhlenbeck and Leon Rosenfeld.

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Notes and Notebooks, 1935-1982

Physical Description: 4.6 Cubic Feet

Arrangement note

Arranged alphabetically.

Scope and Contents note

This series contains bound notebooks and loose notes written by Pais from his time attending university until his professorship at the Rockefeller University. Most of the notes are subject based such as composite particles, field theory, mesons, particle theory, strong interactions and structure problems. There are a number of notebooks that are undated and unlabeled in regards to content.

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Pais Photos, 1920-1997

Physical Description: 1.5 Cubic Feet

Arrangement note

Arranged by type and alphabetically.

Scope and Contents note

This series is divided firstly by the type of media and includes photo prints and negatives, slides, glass slides and photo albums. Most of these are personal photos from Pais' childhood, family and travels. There are also professional photos for publication and publicity purposes, conference photos and lecture slides. There are also three artifacts within this series that were included in the folders with the photos; they are a menorah tie tack and two cloth stars of David belonging to Pais and his father. The artifacts, photo albums and framed photos have been placed in separate flat boxes.

Controlled Access Headings:

- Photographs

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Reprints, 1941-1999

Physical Description: 1.6 Cubic Feet

Arrangement note

Arranged alphabetically.

Scope and Contents note

This series contains pre-prints and reprints of articles by Abraham Pais both individually and as part of a collaboration. The series also contains reprints and pre-prints by colleagues of Pais. These have been either autographed or annotated in some form.

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