



# Pais (Abraham) papers

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Rockefeller Archive Center

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Sleepy Hollow 10591

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## Summary Information

<b>Repository:</b>	Rockefeller Archive Center
<b>Creator - aut:</b>	Pais, Abraham
<b>Title:</b>	Abraham Pais papers, Rockefeller University Faculty
<b>ID:</b>	FA014
<b>Date [inclusive]:</b>	1875-2000
<b>Date [bulk]:</b>	bulk 1936-1998
<b>Physical Description:</b>	24.2 Cubic Feet 96 document cases
<b>Language of the Material:</b>	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

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

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## Arrangement note

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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

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Former Classification: I 450 P166

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## Administrative Information

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### Publication Statement

Rockefeller Archive Center

15 Dayton Avenue  
Sleepy Hollow 10591

[archive@rockarch.org](mailto:archive@rockarch.org)

URL: <http://www.rockarch.org>

## Revision Description

Migrated from Re:discovery to the AT by Marisa Hudspeth 4/13/2009

## Conditions Governing Access

Open for research with select materials restricted are noted. Brittle or damaged items are available at the discretion of RAC.

## 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

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- Nuclear physics
- Physics
- Quantum theory
- Statistical physics
- Unified field theories
- Field theory (Physics)
- Strong interactions (Nuclear physics)
- Cohn, Alfred E. (Alfred Einstein)
- Dyson, Freeman J.
- National Academy of Sciences (U.S.)
- Institute for Advanced Study (Princeton, N.J.)
- Dirac, P. A. M. (Paul Adrien Maurice), 1902-1984
- Yang, Chen Ning, 1922-
- Bohr, Niels, 1885-1962
- Feynman, Richard Phillips



## 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>		
<b>Conditions Governing Access</b>		
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, n.d.	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, n.d.	box 2	folder 3
NB Biographical, n.d.	box 2	folder 4
NB Bibliography, n.d.	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, n.d.	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], n.d.	box 4	folder 12
Manuscript Drafts - [Chapter 1: Themes], n.d.	box 4	folder 13
Manuscript Drafts - [Chapter 2: In Denmark I was born....], n.d.	box 4	folder 14
Manuscript Drafts - [Chapter 3: Boyhood], n.d.	box 4	folder 15
Manuscript Drafts - [Chapter 4: Toward the Twentieth Century....], n.d.	box 4	folder 16
Manuscript Drafts - [Chapter 5: Natura facit saltum], n.d.	box 4	folder 17
Manuscript Drafts - [Chapter 6: Student Days], n.d.	box 5	folder 1

Manuscript Drafts - [Chapter 7: In which Bohr goes to England....], n.d.	box 5	folder 2
Manuscript Drafts - [Chapter 8: Bohr, father of the atom], n.d.	box 5	folder 3
Manuscript Drafts - [Chapter 9: How Bohr secured his permanent base of operations], n.d.	box 5	folder 4
Manuscript Drafts - [Chapter 10: Mathematics in physics], n.d.	box 5	folder 5
Manuscript Drafts - [Chapter 11: Bohr and Einstein], n.d.	box 5	folder 6
Manuscript Drafts - [Chapter 12: A modern Viking who comes on a great errand], n.d.	box 5	folder 7
Manuscript Drafts - [Chapter 13: Then the whole picture changes completely....], n.d.	box 5	folder 8
Manuscript Drafts - [Chapter 14: The Spirit of Copenhagen], n.d.	box 5	folder 9
Manuscript Drafts - [Chapter 15: Looking into the atomic nucleus], n.d.	box 5	folder 10
Manuscript Drafts - [Chapter 16: Toward the edge of physics in the Bohr style, and a bit beyond], n.d.	box 6	folder 1
Manuscript Drafts - [Chapter 17: How Bohr orchestrated experimental progress in the thirties, in physics and biology], n.d.	box 6	folder 2
Manuscript Drafts - [Chapter 18: Of sad events and of major journeys], n.d.	box 6	folder 3
Manuscript Drafts - [Chapter 19: We are suspended in language], n.d.	box 6	folder 4
Manuscript Drafts - [Chapter 20: Fission], n.d.	box 6	folder 5
Manuscript Drafts - [Chapter 21: Bohr, pioneer of "glasnost"], n.d.	box 6	folder 6
Manuscript Drafts - [Chapter 22: In which Bohr moves full steam ahead into his later years], n.d.	box 6	folder 7
Manuscript Drafts - [Chapter 23: Epilog], n.d.	box 6	folder 8
Manuscript Drafts - [A chronology], n.d.	box 6	folder 9
Publication - Illustrations, n.d.	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.

<b>Title/Description</b>	<b>Instances</b>	
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, n.d.	box 7	folder 8
Photographs and Slides, n.d.	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.

<b>Title/Description</b>	<b>Instances</b>	
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, n.d.	box 9	folder 8
Manuscript - Title Page and Preface, n.d.	box 9	folder 9
Manuscript - To the Reader, n.d.	box 9	folder 10
Manuscript - Chapter 1 - Purpose and Plan, n.d.	box 9	folder 11
Manuscript - Chapter 1 - Purpose and Plan, n.d.	box 9	folder 12
Manuscript - Chapter 2 - New Kinds of Rays, n.d.	box 10	folder 1
Manuscript - Chapter 3 - Portrait of a Physicist as a Young Man, n.d.	box 10	folder 2
Manuscript - Chapter 4 - Of Molecules and Entropy and Many Other Things, n.d.	box 10	folder 3
Manuscript - Chapter 5 - The Reality of Molecules, n.d.	box 10	folder 4
Manuscript - Chapter 6 - "Subtle is the Lord....", n.d.	box 10	folder 5
Manuscript - Chapter 7 - The New Kinematics, n.d.	box 10	folder 6
Manuscript - Chapter 8 - The Edge of History, n.d.	box 10	folder 7
Manuscript - Chapter 9 - Relativity, the General Theory, n.d.	box 10	folder 8
Manuscript - Chapter 10 - Herr Professor Einstein, n.d.	box 10	folder 9
Manuscript - Chapter 11 - The Prague Papers, n.d.	box 10	folder 10
Manuscript - Chapter 12 - The Einstein-Grossman Collaboration, n.d.	box 10	folder 11
Manuscript - Chapter 13 - Field Theories of Gravitation: the First Fifty Years, n.d.	box 10	folder 12
Manuscript - Chapter 14 - The Field Equations of Gravitation, n.d.	box 11	folder 1
Manuscript - Chapter 15 - The New Dynamics, n.d.	box 11	folder 2
Manuscript - Chapter 16 - The Suddenly Famous Doctor Einstein, n.d.	box 11	folder 3

Manuscript - Chapter 17 - Unified Field Theory, n.d.	box 11	folder 4
Manuscript - Chapter 18 - Preliminaries, n.d.	box 11	folder 5
Manuscript - Chapter 19 - The Light Quantum, n.d.	box 11	folder 6
Manuscript - Chapter 20 - Einstein and Specific Heats, n.d.	box 11	folder 7
Manuscript - Chapter 21 - The Photon, n.d.	box 11	folder 8
Manuscript - Chapter 22 - Interlude: The BKS Proposal, n.d.	box 11	folder 9
Manuscript - Chapter 23 - A Loss of Identity: the Birth of Quantum Statistics, n.d.	box 11	folder 10
Manuscript - Chapter 24 - Einstein as a Transitional Figure: The Birth of Wave Mechanics, n.d.	box 11	folder 11
Manuscript - Chapter 25 - Einstein's Response to the New Dynamics, n.d.	box 11	folder 12
Manuscript - Chapter 29 - Of Tensors and a Hearing Aid and Many Other Things: Einstein's Collaborators, n.d.	box 11	folder 13
Manuscript - Chapter 30 - How Einstein Got the Nobel Prize, n.d.	box 11	folder 14
Manuscript - "Einstein Lived Here" - Chapters 9 & 10, n.d.	box 11	folder 15
Manuscript - "Einstein Lived Here" - Chapter 11: Einstein and the Jews, n.d.	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
<b>Scope and Contents note</b>		
"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, n.d.	box 13	folder 14
Reference Notes - Chapter 2 - New Kinds of Rays: Part (a) Roentgen, n.d.	box 13	folder 15
Reference Notes - Chapter 2 - New Kinds of Rays: Part (b) Becquerel, n.d.	box 13	folder 16
Reference Notes - Chapter 3 - From Uranic Rays to Radioactivity; Part (a) The Curies, n.d.	box 14	folder 1
Reference Notes - Chapter 3 - From Uranic Rays to Radioactivity; Part (b) Rutherford, n.d.	box 14	folder 2
Reference Notes - Chapter 4 - The First Particle, n.d.	box 14	folder 3
Reference Notes - Chapter 4 - The First Particle, n.d.	box 14	folder 4
Reference Notes - Chapter 6 - Radioactivity's Three Early Puzzles, n.d.	box 14	folder 5



Reference Notes - Chapter 8 - beta-Spectra, 1907-1914, n.d.	box 14	folder 6
Reference Notes - Chapter 9 - Atomic Structure and Spectral Lines, n.d.	box 14	folder 7
Reference Notes - Chapter 9 - Atomic Structure and Spectral Lines, n.d.	box 14	folder 8
Reference Notes - Chapter 9 - Atomic Structure and Spectral Lines, n.d.	box 15	folder 1
Reference Notes - Chapter 10 - 'It was the epoch of belief, it was the epoch of incredulity', n.d.	box 15	folder 2
Reference Notes - Chapter 11 - Nuclear Physics' Tender Age, n.d.	box 15	folder 3
Reference Notes - Chapter 12 - Quantum Mechanics, An Essay, n.d.	box 15	folder 4
Reference Notes - Chapter 14 - Nuclear Physics, the Age of Paradox, n.d.	box 15	folder 5
Reference Notes - Chapter 14 - Nuclear Physics, the Age of Paradox, n.d.	box 15	folder 6
Reference Notes - Chapter 14 - Nuclear Physics, the Age of Paradox, n.d.	box 15	folder 7
Reference Notes - Chapter 15 - Quantum Fields, or How Particles Are Made and How They Disappear, n.d.	box 15	folder 8
Reference Notes - Chapter 16 - Battling the Infinite, n.d.	box 16	folder 1
Reference Notes - Chapter 16 - Battling the Infinite, n.d.	box 16	folder 2
Reference Notes - Chapter 16 - Battling the Infinite, n.d.	box 16	folder 3
Reference Notes - Chapter 16 - Battling the Infinite; Part (d) Quantum Electrodynamics in the Thirties, n.d.	box 16	folder 4
Reference Notes - Chapter 16 - Battling the Infinite; Part (d) Quantum Electrodynamics in the Thirties, n.d.	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, n.d.	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, n.d.	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, n.d.	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, n.d.	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, n.d.	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, n.d.	box 17	folder 5
Reference Notes - Chapter 20 - Onset of an Era: New Forms of Matter Appear, Old Symmetries Crumble, n.d.	box 17	folder 6
Reference Notes - Chapter 20 - Onset of an Era: New Forms of Matter Appear, Old Symmetries Crumble, n.d.	box 18	folder 1
Reference Notes - Chapter 20 - Onset of an Era: New Forms of Matter Appear, Old Symmetries Crumble, n.d.	box 18	folder 2
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, n.d.	box 18	folder 3
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, n.d.	box 18	folder 4
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, n.d.	box 18	folder 5
Reference Notes - Chapter 21 - Essay on Modern Times: 1960-1983, n.d.	box 18	folder 6
Manuscript - Master Copy - A History of Elementary Particles [Original Version of "Inward Bound"], n.d.	box 19	folder 1
Manuscript - Master Copy - A History of Elementary Particles [Original Version of "Inward Bound"], n.d.	box 19	folder 2
Manuscript - Chapter 3 - From Uranic Rays to Radioactivity, n.d.	box 19	folder 3
Manuscript - Chapter 4 - The First Particle, n.d.	box 19	folder 4
Manuscript - Chapter 5 - Earliest Physiological Discoveries, n.d.	box 19	folder 5
Manuscript - Chapter 6 - Radioactivity's Three Early Puzzles, n.d.	box 19	folder 6
Manuscript - Chapter 7 - Pitfalls of Simplicity, n.d.	box 19	folder 7
Manuscript - Chapter 8 - beta-Spectra, 1907-1914, n.d.	box 19	folder 8
Manuscript - Chapter 9 - Atomic Structure and Spectral Lines, n.d.	box 19	folder 9
Manuscript - Chapter 10 - 'It was the epoch of belief, it was the epoch of incredulity', n.d.	box 19	folder 10
Manuscript - Chapter 11 - Nuclear Physics' Tender Age, n.d.	box 19	folder 11
Manuscript - Chapter 11 - Nuclear Physics' Tender Age, n.d.	box 20	folder 1
Manuscript - Chapter 11 - Nuclear Physics' Tender Age, n.d.	box 20	folder 2

Manuscript - Chapter 12 - Quantum Mechanics, An Essay, n.d.	box 20	folder 3
Manuscript - Chapter 13 - First Encounters with Symmetry and Invariance, n.d.	box 20	folder 4
Manuscript - Chapter 14 - Nuclear Physics, the Age of Paradox, n.d.	box 20	folder 5
Manuscript - Chapter 15 - Quantum Fields, or How Particles are Made and How They Disappear, n.d.	box 20	folder 6
Manuscript - Chapter 16 - Battling the Infinite, n.d.	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, n.d.	box 20	folder 8
Manuscript - Chapter 18 - Of Quantum Electrodynamics' Triumphs and Limitations and of a New Particle's Sobering Impact, n.d.	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, n.d.	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, n.d.	box 21	folder 2
Manuscript - Chapter 20 - Onset of An Era: New Forms of Matter Appear, Old Symmetries Crumble, n.d.	box 21	folder 3
Manuscript - Chapter 20 - Onset of An Era: New Forms of Matter Appear, Old Symmetries Crumble, n.d.	box 21	folder 4
Manuscript - Chapter 21 - Quantum Field Theory Redux/Essays on Modern Times, 1960-1983, n.d.	box 21	folder 5
Manuscript - Chapter 21 - Essays on Modern Times, 1960-1983, n.d.	box 21	folder 6
Manuscript - Chapter 22 - Being a Conclusion that Begins [Starts] as Epilog and Ends as Prolog, n.d.	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.

Title/Description	Instances	
Reference Notes, 1942, 1994	box 22	folder 3
Reference Notes - Newspapers, 1945	box 22	folder 4
Reference Notes - War, 1947-1992	box 22	folder 5
Reference Notes - Postwar, 1945-1993	box 22	folder 6
Reference Notes - Brookhaven National Laboratory, 1993	box 22	folder 7
Manuscript - Chapters 1-10, n.d.	box 22	folder 8
Manuscript - Chapters 1-11, n.d.	box 23	folder 1
Manuscript - Chapters 11-14, n.d.	box 23	folder 2
Manuscript - Chapters 15-22, n.d.	box 23	folder 3
Manuscript - Chapters 15-22, n.d.	box 23	folder 4
Manuscript - Chapters 23-28, n.d.	box 23	folder 5
Manuscript - Chapters 23-28, n.d.	box 23	folder 6
Manuscript - Chapters 29-33, n.d.	box 24	folder 1
Manuscript - Chapters 29-33, n.d.	box 24	folder 2
Publication - A Tale of Two Continents, 1997-1998	box 24	folder 3
Originals - Reference Notes - Newspapers, 1945	box 93	folder 1

## 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.

Title/Description	Instances	
"American Scientist" - "How Einstein Got the Nobel Prize", July/August 1982	box 24	folder 4
Anti-neutrino Reactions, n.d.	box 24	folder 5
Approximate Unitary Symmetry and the Parity Question, 1964	box 24	folder 6
Born, Max, 1926-1982	box 24	folder 7
Classical Example of Essentially Singular Coupling, 1964	box 24	folder 8
Comments on the Present Status of the Strong Interactions Problems - Unpublished Manuscript, n.d.	box 24	folder 9
Compton Scattering on Stable Targets of Arbitrary Spin, n.d.	box 24	folder 10
CP-Invariance & 2pi-Modes of Long-Lived Neutral K-Particles (Pais/Grsey), n.d.	box 24	folder 11
Dirac, 1947-1999	box 24	folder 12
The Discovery of the Electron, 1997	box 24	folder 13
The Dynamics of Science, 1921-1986	box 24	folder 14
The Dynamics of Science, 1955-1998	box 24	folder 15
Energy Bounds for Charm and for Heavy Lepton Production in the $e^+ e^-$ Annihilation, 1974-1977	box 24	folder 16
Energy Peaks, n.d.	box 25	folder 1
Einstein Addenda, 1910-1990	box 25	folder 2
Einstein Addenda, 1910-1990	box 25	folder 3
A.E. [Albert Einstein] - A. A. A. S. [American Association for the Advancement of Science] Lecture, 1980	box 25	folder 4
Einstein Manuscripts, 1981-1982	box 25	folder 5
Einstein: Origin of E. Legend, n.d.	box 25	folder 6
Fermilab Paper, 1985	box 25	folder 7
A Field Theory of Weak Interactions I, n.d.	box 25	folder 8
A Field Theory of Weak Interactions I, n.d.	box 25	folder 9
A Field Theory of Weak Interactions II, n.d.	box 25	folder 10
Freeman Dyson, 1996	box 26	folder 1
Glimpses of Oskar Klein as Scientist and Thinker, 1994	box 26	folder 2
The Image of Physics - Unpublished Manuscript, 2000	box 26	folder 3

On a Plane Ising Lattice with First and Second Interactions, 1941-1963	box 26	folder 4
"Journal of Jocular Physics" - Vol. I-III, 1945-1955	box 26	folder 5
"Journal on Nuclear Eqs.", 1951	box 26	folder 6
"Journal on Nuclear Eqs.", 1951	box 26	folder 7
Lorentz Invariance & SU(6) Theory (Pais with Beg), 1965	box 26	folder 8
Lorentz Invariance & SU(6) Theory II (Pais with Beg), n.d.	box 26	folder 9
The Many pi-Meson Problem II, n.d.	box 26	folder 10
Marie Curie, 1999	box 26	folder 11
Miscellaneous, 1979-2001	box 27	folder 1
Miscellaneous Quote Sources, 1944-1993	box 27	folder 2
Niels Bohr on the Danish Scene, n.d.	box 27	folder 3
Nuclear Physics in the Netherlands, the Early Years, 1990	box 27	folder 4
Notes on W3, n.d.	box 27	folder 5
Parity SU(6), n.d.	box 27	folder 6
"Particle Jungle" (TV Manuscript), 1965	box 27	folder 7
Particles, 1968	box 27	folder 8
Paul Dirac: Aspects of His Life and Work, n.d.	box 27	folder 9
Peaks in Mesonic Systems (Nauenberg/Pais), 1964	box 27	folder 10
Pauli, Wolfgang, 1955, n.d.	box 27	folder 11
Phase Shift Extraction....., n.d.	box 27	folder 12
"The Physical Review:" Then and Now, 1993	box 27	folder 13
Physics in Denmark, from a College for the Clergy to Modern Times, 1996	box 27	folder 14
"Physics Today" [Pais article, "The Princeton Period"], 1967	box 27	folder 15
"Physics Today" [Pais contribution, "Stalin, Fuchs, and the Soviet Bomb"], 1990	box 27	folder 16
pi lamda - Phase Shift Information....., n.d.	box 27	folder 17
Pion Phase-Shift Information from K [subscript 14] Decays, 1968 and other	box 27	folder 18
Planck, Max (Materials for Essays), n.d.	box 27	folder 19
Planck, Max, n.d.	box 28	folder 1
Polaron, n.d.	box 28	folder 2
The Power of the Word, n.d.	box 28	folder 3

Problems in the Theory of Elementary Particles, n.d.	box 28	folder 4
Quadruple Moment, n.d.	box 28	folder 5
Reflections on Bohr and Einstein, n.d.	box 28	folder 6
Relativistic Crossing Symmetric SU(6), n.d.	box 28	folder 7
Reminiscences from the Post-War Years, 1967	box 28	folder 8
Res Jost, n.d.	box 28	folder 9
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Scattering Formalism for Singular Potential Theory, n.d.	box 28	folder 11
Shabbos in Cecilienhof, n.d.	box 28	folder 12
Siena, "Methods and Problems in the Dynamics of Weak Interactions", n.d.	box 28	folder 13
Singular Potentials and Peratization II (Pais/Wu), n.d.	box 28	folder 14
Spin, 1967-1968	box 29	folder 1
Spin - Unitary Spin Independence (Pais), n.d.	box 29	folder 2
Spin - Unitary Spin Independence II, n.d.	box 29	folder 3
Spin, Unitary Spin and Weak Interactions (Unpublished Manuscript), n.d.	box 29	folder 4
Spin/Weak Interactions, n.d.	box 29	folder 5
[A Study of K Decay], n.d.	box 29	folder 6
Processing Information: <b>Processing Information</b> <p>The title of this article was expressed as a scientific expression and was not able to be duplicated in the database. For the exact expression, please consult the print finding aid, available at the RAC or through the RAC web site.</p>		
SU(6) Completed, n.d.	box 29	folder 7
SU(6) - Old Notes, 1964-1965	box 29	folder 8
SU(6)/Semi-leptonic Interactions (Pais/Beg), 1964	box 29	folder 9
A Suggestion Concerning the Reflexion Properties of Hyperons and K-Meson (Unpublished Manuscript), n.d.	box 29	folder 10
Review of "Symmetries and Reflections" and Article; "Low Energy Theorems for Spin....", n.d.	box 29	folder 11
Theoretical High Energy Physics, n.d.	box 29	folder 12
Theoretical Particle Physics, 1999	box 29	folder 13
Tops - "Excursion into the Theory of Tops", n.d.		

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Vector Meson Theory, 1950-1964	box 30	folder 7
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Vertices with Partial SU(6,6) Structure, n.d.	box 31	folder 1
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Weak Interactions I, n.d.	box 31	folder 3
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Weak Interactions - "A Field Theory of Weak Interactions III" [Unpublished], n.d.	box 31	folder 6
Woolly Cusp (Galley Proof), n.d.	box 31	folder 7
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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.

Title/Description	Instances	
A (Abraham - "Art Quarterly"), n.d.	box 31	folder 9



A (Alembic Club - Andrade), n.d.	box 31	folder 10
Abraham Pais - "Current Biography", 1994	box 31	folder 11
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B (Badash - Boltzmann), n.d.	box 32	folder 8
B (Born - Bush), n.d.	box 32	folder 9
B-decay, n.d.	box 32	folder 10
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de Broglie, Louis, (1922-1925, 1962-1989)	box 33	folder 2
C (Casimir - Cohen), n.d.	box 33	folder 3
C (Casimir - Curie), n.d.	box 33	folder 4
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F (Farrar - Freundenthal), n.d.	box 35	folder 9
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### Scope and Contents note

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Wigner, Eugene P., 1926-1998	box 49	folder 12
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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.

Title/Description	Instances	
Advanced Quantum Mechanics (Field Theory) - Columbia University, Winter 1955-1956, 1955-1956	box 50	folder 4
Astrophysics, n.d.	box 50	folder 5
Balfour Lectures, n.d.	box 50	folder 6
"Continuous Groups and Reflections in Quantum Mechanics" - by W. Pauli (Lectures 1-28), 1958	box 50	folder 7

Dispersion Relations, June 1959	box 50	folder 8
Field Theory - Columbia University, Spring 1955, 1955	box 50	folder 9
Freeman Dyson, 1996	box 51	folder 1
Heinz Rudolph Pagels, 1988	box 51	folder 2
Helen Dukas, 1982	box 51	folder 3
Multipion Systems Lecture (Bounds etc.), 1963, 1974	box 51	folder 4
Petiau, G. - Lectures, 1945-1956	box 51	folder 5
Petiau, G. - Lectures, 1945-1956	box 51	folder 6
Planck Lecture - NY Copy, n.d.	box 51	folder 7
The Power of the Word, n.d.	box 51	folder 8
RU "Popular Lecture", n.d.	box 51	folder 9
X-Rays and Radium Lecture, n.d.	box 51	folder 10
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Miscellaneous Lectures, 1965-1967	box 51	folder 13
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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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<u>Conditions Governing Access:</u> <b>Conditions Governing Access</b> Restricted from scholarly access.		
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D (Dalitz - Dyson), n.d.	box 53	folder 14
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Dukas, Helen, 1982	box 53	folder 16
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E (Ehrenfest - Extermann), n.d.	box 53	folder 18
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Faculty - IAS [Institute for Advanced Study], 1956-1957	box 54	folder 4
Faculty - IAS [Institute for Advanced Study], 1958-1959	box 54	folder 5
Faculty - IAS [Institute for Advanced Study], 1959-1960	box 54	folder 6
Faculty - IAS [Institute for Advanced Study], 1960-1962	box 54	folder 7
Faculty - IAS [Institute for Advanced Study], 1962	box 54	folder 8
F.B.I., 1981-1999	box 54	folder 9
FOM [Foundation for Fundamental Research of Matter], 1975	box 54	folder 10
G (Garrison - Gurse), n.d.	box 54	folder 11
"The Genius of Science", 1999-2000	box 55	folder 1
H (Ha - Hulthn), n.d.	box 55	folder 2
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Conditions Governing Access:

**Conditions Governing Access**

Restricted from scholarly access.

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L (Lamb - Lyons), n.d.	box 56	folder 7
Lederberg, 1960, 1965, 1978	box 56	folder 8
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O (Oehme - Omni), n.d.	box 57	folder 1
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Von Neumann, 1949-1992	box 58	folder 7
W (Waller - Wu), n.d.	box 58	folder 8
Weisskopf, Victor, 1981-1984	box 58	folder 9
Y (Yang - Yukawa), n.d.	box 58	folder 10
Z (Zanstra - ZWO), n.d.	box 58	folder 11
Miscellaneous Correspondence, 1987-1990	box 58	folder 12

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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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Calc Post V., 1951	box 59	folder 1
CERN - Geneva 23 Switzerland, n.d.	box 59	folder 2
CERN Lectures, 1960	box 59	folder 3
Colliding Beams, 1957-1970		

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Columbia, n.d.	box 59	folder 5
Composite Particles - Stanford, August 1951	box 59	folder 6
Conform _____ [2nd word illegible], n.d.	box 59	folder 7
Cosmic Rays, 1938-1939	box 59	folder 8
Covariance Problems, n.d.	box 60	folder 1
CP, 1958-1973	box 60	folder 2
CP, 1958-1973	box 60	folder 3
Damping Problems, n.d.	box 60	folder 4
Differentiaal - Meetkunde, 1937-1938	box 60	folder 5
Essays, 1958-1982	box 60	folder 6
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Inclusive Reactions, n.d.	box 62	folder 3
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ISING - Model, 1951	box 62	folder 6
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Klasnik Electroneutheorie - Institute for Advanced Study, n.d.	box 63	folder 3
LCA, 1971-1972	box 63	folder 4
Many Body Problems I - Institute for Advanced Study, n.d.	box 63	folder 5
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Many Body Problems III - Institute for Advanced Study, n.d.	box 63	folder 7
Maxwell - Ref. Chap. 1, 1855-1904, n.d.	box 64	folder 1

### Scope and Contents note

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Niels Bohr, 1986-1987	box 64	folder 5
Non-Leptonic Decays, 1957, 1960-1961	box 64	folder 6
Non-Localized Fields - Institute for Advanced Study, n.d.	box 64	folder 7
Notes on Strong Coupling Theory, n.d.	box 65	folder 1
Notes 76 - Rockefeller University, 1976	box 65	folder 2
Nuclear Physics III, Jost - Pais Calculations - Institute for Advanced Study, 1951	box 65	folder 3
Nuclear Theory I - Institute for Advanced Study - Course, 1948-1949	box 65	folder 4
Nuclear Theory II - Institute for Advanced Study, 1948-1949	box 65	folder 5
Particles I - Institute for Advanced Study, 1953-1954	box 65	folder 6
Particles II - Institute for Advanced Study, n.d.	box 65	folder 7
Particles III - Institute for Advanced Study, n.d.	box 65	folder 8
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## 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.

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Autobiography Pictures, ca. 1928-1988	box 75	folder 5
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Family Pictures, 1953-1956, n.d.	box 75	folder 8
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Einstein Book Pictures, 1930, n.d.	box 75	folder 11
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Cloth Star of David - J. Pais, n.d.	box 075A	folder 1
Metal Menorah Tie Tack, n.d.	box 075B	folder 1
Cloth Star of David - J. Pais, n.d.	box 075A	folder 1
Metal Menorah Tie Tack, n.d.	box 075B	folder 1



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Japanese Artifacts, 1957	box 76	folder 10
[Loose Photos], 1946-1958	box 76	folder 11
Michigan - Rochester Collaboration 405GeV Proton-Proton Interaction in the 30-inch Hydrogen Bubble Chamber at National Accelerator Laboratory, May 1973	box 76	folder 12
[Pais Portrait], n.d.	box 76	folder 13
Paul Dirac - Photographs, Royal Society Talk, 1995	box 76	folder 14
Personal - Josh at Beach, n.d.	box 76	folder 15
Photographs, 1981, n.d.	box 76	folder 16
Photographs, Personal, n.d.	box 76	folder 17
Photos from Trip to Soviet Union, n.d.	box 76	folder 18
Pictures, 1941-1994	box 76	folder 19
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Pictures and Related Papers, 1920-1943, 1982	box 76	folder 21
Pictures & WWII Documents, 1935-1968, n.d.	box 77	folder 1
Pictures Taken by Abraham Pais, n.d.	box 77	folder 2
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Glass Slides - A. Pais #7, n.d.	box 86	folder 19
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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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Calculability and Naturalness in Gauge Theories - 135, 1974	box 87	folder 4
Chapter 2 - Introducing Atoms and Their Nuclei, n.d.	box 87	folder 5
Charge Independence and Multiple Pion Production, 1952	box 87	folder 6
Charmed-Meson Lifetime Ratios and Production in $e^{+}e^{-}$ Collisions - 149, 1977	box 87	folder 7
Classical Example of Essentially Singular Coupling, 1964	box 87	folder 8
A Class of Gauge Theories with Superweak CP Violation - 130, 1973	box 87	folder 9
Colliding Electron Versus Colliding Photon Beams - Comments on Nuclear and Particle Physics - 119, 1972	box 87	folder 10
Comment on Nonleptonic Decays of Charmed Hadrons - 139, 1975	box 87	folder 11
Comments on Hadronic Helicity Conservation in Inelastic Lepton-Nuclear Reactions - 120, 1971	box 87	folder 12
Comments on the Production and Decay of Charged Heavy Leptons - 147, 1976	box 87	folder 13
Correlations Between Cusps in Differential Cross Sections and in Polarizations, 1961	box 87	folder 14
CP Violation in Charged-Particle Decays - 142, 1975	box 87	folder 15
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De Huidige Stand van Het Pariteitsprobleem en van Het Tijdsomkeerprobleem, 1957	box 87	folder 19
Developments in the Theory of the Electron - 14, 1948	box 87	folder 20
The Discovery of the Electron - "Beam Line" (Stanford Linear Accelerator Center), 1997	box 87	folder 21

Dynamical Asymmetry in Octet Space - Nobel Symposium 8: Elementary Particle Theory: Relativistic Groups and Analyticity - 108, n.d.	box 87	folder 22
Dynamical Symmetry in Particle Physics - 97, 1966	box 87	folder 23
The Early History of the Theory of the Electron: 1897-1947, 1972	box 87	folder 24
Einstein and the Press - "Physics Today", 1994	box 87	folder 25
Einstein, Newton, and Success - Einstein, A Centenary Volume - 154, 1979	box 87	folder 26
Electromagnetic Effects on Decays of G Eigenstates, 1962	box 87	folder 27
Electromagnetic Mass, n.d.	box 87	folder 28
Electron - 146, 1981	box 87	folder 29
Energy Bounds for Charm and for Heavy Lepton Production in $e^+e^-$ Annihilation - 148, 1976	box 87	folder 30
The Energy Momentum Tensor in Projective Relativity Theory, 1941	box 87	folder 31
Fachbericht ber schwache Wechselwirkungen - 88, n.d.	box 87	folder 32
A Field Theory of Weak Interactions. I. - 70, 1963	box 87	folder 33
A Field Theory of Weak Interactions. II. - 75, 1964	box 87	folder 34
Fluctuations of the Charged Pion Number in $e^+e^-$ Annihilation - 138, 1974	box 87	folder 35
4. Complex Octorions, n.d.	box 87	folder 36
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Gauge Theories: How Does It Stand? - 145, 1975	box 87	folder 38
A General Transformation of the Symmetrical Pseudoscalar Theory, 1959	box 87	folder 39
Generalization of the Glashow-Iliopoulos-Maiani Mechanism: Horizontal and Vertical Flavor Mixing - 155, 1979	box 87	folder 40
George E. Uhlenbeck (December 6, 1900-October 31, 1988), 1989	box 88	folder 1
Glimpses of Oskar Klein as Scientist and Thinker, 1994	box 88	folder 2
Hadronic Helicity Conservation and Inelastic Lepton - Nucleon Reactions - 118, 1971	box 88	folder 3
Het Institute for Advanced Study, n.d.	box 88	folder 4
Higher Symmetries (Erice) - 96, 1966	box 88	folder 5
How Can We Verify the Weak Selection Rules of the New Particles? - 150, 1977	box 88	folder 6
How Einstein Got the Nobel Prize - "American Scientist" - 161, 1982	box 88	folder 7

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