



# Pais (Abraham) papers

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## Summary Information

|                                  |   |
|----------------------------------|---|
| <b>Repository:</b>               | Rockefeller Archive Center                          |
| <b>Creator - aut:</b>            | Pais, Abraham                                       |
| <b>Creator:</b>                  | Rockefeller University                              |
| <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>     | 35.3 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

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

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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 |

## 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, 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 |
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## 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.

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### Scope and Contents note

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| R (Rabi - Rydberg), n.d.                    | box 45 | folder 7 |
| Rabi, I. I., 1946, 1970-1996                | box 45 | folder 8 |
| Rabi, I. I., 1946, 1970-1996                | box 45 | folder 9 |
| Reference Notes, n.d.                       | box 46 | folder 1 |
| Reviews, 1986-1999                          | box 46 | folder 2 |

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|--|--------|-----------|
| Rockefeller Institute, 1967-1996   | box 46 | folder 3  |
| <u>Conditions Governing Access:</u><br><b>Conditions Governing Access</b><br>Restricted from scholarly research. |        |           |
| Russian for the Scientist, n.d.  | box 46 | folder 4  |
| Rutherford, Ernest, 1903-1913, 1968, 1991  | box 46 | folder 5  |
| S (Salaman - Sutherland), n.d.   | box 46 | folder 6  |
| S (Sagnac - Silliman), n.d.  | box 46 | folder 7  |
| S (Smyth - Stuewer), n.d.  | box 46 | folder 8  |
| Scattering Cusps, n.d.   | box 46 | folder 9  |
| Scattering Theory, n.d.  | box 46 | folder 10 |
| Schulmann, Robert - Note, n.d.   | box 47 | folder 1  |
| Schweber, Silvan, 1928, 1989   | box 47 | folder 2  |
| "Serber Says", 1947  | box 47 | folder 3  |
| 70th Birthday, 1988  | box 47 | folder 4  |
| SF- - Dr. E [Einstein], 1917-1920, 1981  | box 47 | folder 5  |
| Smoluchowski - Opalescence, 1908-1957  | box 47 | folder 6  |
| Speiser, D., 1984  | box 47 | folder 7  |
| Spin, 1922-1930, 1953-1982   | box 47 | folder 8  |
| Spin, 1922-1930, 1953-1982   | box 47 | folder 9  |
| Stachel, John, 1971-1983   | box 47 | folder 10 |
| Statistical Physics, (1865)-1895, 1957-1981  | box 48 | folder 1  |
| Statistical Physics, (1865)-1895, 1957-1981  | box 48 | folder 2  |
| Students, 1981-1982  | box 48 | folder 3  |
| <u>Conditions Governing Access:</u><br><b>Conditions Governing Access</b><br>Restricted from scholarly research. |        |           |
| T (Talmey - Treder), n.d.  | box 48 | folder 4  |
| T (Tait - Tuan), n.d.  | box 48 | folder 5  |
| Tashkent, 1972   | box 48 | folder 6  |
| Theoretical Nuclear Physics, 1936-1988   | box 48 | folder 7  |
| Theoretical Nuclear Physics, 1936-1988   | box 48 | folder 8  |

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|---|--------|-----------|
| U (Uehling - Urey), n.d.                                | box 48 | folder 9  |
| UFT [Unified Field Theory], 1918-1979                   | box 48 | folder 10 |
| UFT [Unified Field Theory], 1918-1979                   | box 49 | folder 1  |
| Uhlenbeck, 1963-1979                                    | box 49 | folder 2  |
| U, V, W (Unslid - Winteler), n.d.                       | box 49 | folder 3  |
| V (van der Wrden - Verwey), n.d.                        | box 49 | folder 4  |
| Varia, 1927-1990  | box 49 | folder 5  |
| Varia - Amsterdam, 1970                                 | box 49 | folder 6  |
| Varia - Family/Parents, 1956-1969, n.d.                 | box 49 | folder 7  |
| Velocity of Light, 1964                                 | box 49 | folder 8  |
| W (van der Waals - Wooster), n.d.                       | box 49 | folder 9  |
| Weak Interactions I & II, n.d.                          | box 49 | folder 10 |
| Wigner, Eugene P., 1926-1998                            | box 49 | folder 11 |
| Wigner, Eugene P., 1926-1998                            | box 49 | folder 12 |
| Wu, C. S., 1952-1977                                    | box 50 | folder 1  |
| Y, Z (Young - Zernike), n.d.                            | box 50 | folder 2  |
| Yang, C. N. - Introduction to High Energy Physics, n.d. | box 50 | folder 3  |

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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 |

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|---|--------|-----------|
| 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 |
| Miscellaneous Lectures, 1957-1959                     | box 51 | folder 11 |
| Miscellaneous Lectures, 1960-1964                     | box 51 | folder 12 |
| Miscellaneous Lectures, 1965-1967                     | box 51 | folder 13 |
| Miscellaneous Lectures, 1968-1988                     | box 52 | folder 1  |
| Miscellaneous Lectures, 1978-1979                     | box 52 | folder 2  |
| Miscellaneous Lectures, n.d.                          | box 52 | folder 3  |

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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.

| Title/Description          | Instances |          |
|----------------------------|-----------|----------|
| A (Aaserud - Auburn), n.d. | box 52    | folder 4 |
| B (Baker - Brown), n.d.    | box 52    | folder 5 |
| Berkeley, 1956-1963        | box 52    | folder 6 |

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|--|--------|-----------|
| Berlin, 1982-1990  | box 52 | folder 7  |
| Biodata - Others, 1980-1982  | box 52 | folder 8  |
| Bohr, A., 1946-1979  | box 52 | folder 9  |
| Bohr Memorial, 1962-1963   | box 52 | folder 10 |
| Bohr, N. - Reminiscences, 1954-1984  | box 52 | folder 11 |
| Bohr, Professor N., 1947-1982  | box 52 | folder 12 |
| Books, 1979-1981   | box 53 | folder 1  |
| Breit, C., 1946-1967   | box 53 | folder 2  |
| Bronk, Dr. Detlev W., 1963-1970  | box 53 | folder 3  |
| <u>Conditions Governing Access:</u><br><b>Conditions Governing Access</b><br>Restricted from scholarly access. |        |           |
| C (Carnegie - Curie), n.d.   | box 53 | folder 4  |
| Car, 1968-1987   | box 53 | folder 5  |
| CERN, 1955-1979  | box 53 | folder 6  |
| China, 1982-1987   | box 53 | folder 7  |
| Cohen, E. G. D., 1975-1997   | box 53 | folder 8  |
| Columbia University, 1954-1968   | box 53 | folder 9  |
| Cool, R., 1966-1970  | box 53 | folder 10 |
| Coral Gables, 1979-1980  | box 53 | folder 11 |
| Council on Foreign Relations, 1980-1982  | box 53 | folder 12 |
| <u>Conditions Governing Access:</u><br><b>Conditions Governing Access</b><br>Restricted from scholarly access. |        |           |
| Crack-pot File, 1947-1987  | box 53 | folder 13 |
| D (Dalitz - Dyson), n.d.   | box 53 | folder 14 |
| Dubna, M. S., 1964   | box 53 | folder 15 |
| Dukas, Helen, 1982   | box 53 | folder 16 |
| Dyson, Dr. Freeman, 1949-1971  | box 53 | folder 17 |
| E (Ehrenfest - Extermann), n.d.  | box 53 | folder 18 |
| Einstein Collected Works, 1984-1993  | box 53 | folder 19 |
| Electronic Nobel Museum (ENM), 1999  | box 53 | folder 20 |



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|---|--------|-----------|
| F (Feinberg - Fulton), n.d.                               | box 53 | folder 21 |
| Faculty - IAS [Institute for Advanced Study], 1951-1953   | box 54 | folder 1  |
| Faculty - IAS [Institute for Advanced Study], 1954        | box 54 | folder 2  |
| Faculty - IAS [Institute for Advanced Study], 1955-1956   | box 54 | folder 3  |
| 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  |
| House, 1978-1989  | box 55 | folder 3  |
| I (Immigration & Naturalization - Italie), n.d.           | box 55 | folder 4  |
| Institute for Advanced Study, 1945-1954                   | box 55 | folder 5  |
| Institute for Advanced Study, 1959, 1962-1963             | box 55 | folder 6  |
| Insurance, 1993   | box 55 | folder 7  |
| [Isotopic Spin], 1950-1952                                | box 55 | folder 8  |
| Israel, 1976-1977   | box 55 | folder 9  |
| J (Japan - Judge), n.d.                                   | box 55 | folder 10 |
| Japan, 1953   | box 55 | folder 11 |
| Jost, Res., 1972-1985                                     | box 55 | folder 12 |
| Jost, Res., 1972-1985                                     | box 55 | folder 13 |
| K (Kac - Kuiper), n.d.                                    | box 56 | folder 1  |
| Ke [subscript 4], 1967-1968                               | box 56 | folder 2  |
| Khuri, Dr. N. N., 1963-1968                               | box 56 | folder 3  |
| Knickerbocker Club, 1978-1986                             | box 56 | folder 4  |

Conditions Governing Access:

**Conditions Governing Access**

Restricted from scholarly access.

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|---|--------|-----------|
| Koch, Congressman E., 1969                                      | box 56 | folder 5  |
| Kramers, H. A., 1943-1952                                       | box 56 | folder 6  |
| L (Lamb - Lyons), n.d.  | box 56 | folder 7  |
| Lederberg, 1960, 1965, 1978                                     | box 56 | folder 8  |
| Lee & Yang, 1949-1958   | box 56 | folder 9  |
| Life Energies, 1970-1971  | box 56 | folder 10 |
| M (Manneback - Munksgaard), n.d.                                | box 56 | folder 11 |
| Michel, Louis, 1952-1965  | box 56 | folder 12 |
| Montpeirous, Raymonde, 1964                                     | box 56 | folder 13 |
| Moscow, 1955-1959   | box 56 | folder 14 |
| MRS [Model, Roland, and Stone], 1960-1962                       | box 56 | folder 15 |
| N (National Arts Club - Nobel Symposia), n.d.                   | box 56 | folder 16 |
| National Academy of Sciences, 1962-1963                         | box 56 | folder 17 |
| National Science Foundation & Dept. of the Air Force, 1967-1968 | box 56 | folder 18 |
| New York, 1964-1965   | box 56 | folder 19 |
| Nordic Institute, n.d.  | box 56 | folder 20 |
| O (Oehme - Omni), n.d.  | box 57 | folder 1  |
| Oppenheimer Prize, 1978-1979                                    | box 57 | folder 2  |
| P (Panofsky - Purcell), n.d.                                    | box 57 | folder 3  |
| Pagels, H. R., 1966-1968, 1988                                  | box 57 | folder 4  |
| Pais, L. [Lila], n.d.   | box 57 | folder 5  |
| Pauli Correspondence, 194[?]-1963                               | box 57 | folder 6  |
| Permission Granted, 1990-1993                                   | box 57 | folder 7  |
| Pictures, 1981  | box 57 | folder 8  |
| Princeton, 1977-1979  | box 57 | folder 9  |
| Princeton Visiting Committee, 1980-1987                         | box 57 | folder 10 |
| R (Rabi - Ruderman), n.d.                                       | box 57 | folder 11 |
| Rntgen, 1974  | box 57 | folder 12 |
| Rosenfeld, L., 1941-1966  | box 57 | folder 13 |
| S (Sakarov - Synge), n.d.                                       | box 57 | folder 14 |

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| Salary, 1981                            | box 57 | folder 15 |
| Sanda, A., 1974-1991                    | box 57 | folder 16 |
| "SLAC", 1968-1984                       | box 57 | folder 17 |
| Smithsonian, 1978-1979                  | box 57 | folder 18 |
| Stockholm, 1982-1998                    | box 57 | folder 19 |
| T (Talmi - Treiman), n.d.               | box 58 | folder 1  |
| Travel, 1948-1960                       | box 58 | folder 2  |
| U (Ufford - Utiyama), n.d.              | box 58 | folder 3  |
| USSR, 1965-1974                         | box 58 | folder 4  |
| V (Van Hove - Villars), n.d.            | box 58 | folder 5  |
| Veltman, 1966-1975                      | box 58 | folder 6  |
| 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.

| Title/Description                  | Instances |          |
|------------------------------------|-----------|----------|
| 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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|--|--------|----------|
|  | box 59 | folder 4 |
| 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 |
| Field Theory, n.d.                                 | box 60 | folder 7 |
| Field Theory, 1948-1949                            | box 60 | folder 8 |
| Field Theory II, 1948-1949                         | box 61 | folder 1 |
| <b>Scope and Contents note</b>                     |        |          |
| Strong Coupling                                    |        |          |
| Field Theory III, 1951                             | box 61 | folder 2 |
| Field Theory Notes, n.d.                           | box 61 | folder 3 |
| Field Theories with Non-Localized Action - I, n.d. | box 61 | folder 4 |
| Formularium, n.d.                                  | box 61 | folder 5 |
| Functie Theorie, 1938-1939                         | box 61 | folder 6 |
| Helicity, n.d.                                     | box 61 | folder 7 |
| Helium I & II, 1941                                | box 61 | folder 8 |
| [History of Atomic Structure], n.d.                | box 61 | folder 9 |
| History of Physics, 1947-1961                      | box 62 | folder 1 |
| Hydrodynamics, n.d.                                | box 62 | folder 2 |
| Inclusive Reactions, n.d.                          | box 62 | folder 3 |
| Institute for Advanced Study - I, n.d.             | box 62 | folder 4 |
| Integ[rnabubeuing] - Professor Wolff, 1938-1939    | box 62 | folder 5 |
| ISING - Model, 1951                                | box 62 | folder 6 |
| Ising Model - Calculations - Stanford, 1951        | box 62 | folder 7 |
| Isospin Bounds, n.d.                               | box 63 | folder 1 |

|   |        |          |
|---|--------|----------|
| JETPL, n.d.   | box 63 | folder 2 |
| Klasnike 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 |
| Many Body Problems II - Institute for Advanced Study, 1959      | box 63 | folder 6 |
| 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

Undated notes.

|  |        |          |
|--|--------|----------|
| Mesons, Mass Spectra, Non-Localizable Systems - Institute for Advanced Study, n.d. | box 64 | folder 2 |
| Models, 1967-1975  | box 64 | folder 3 |
| Neutral Currents; Heavy Leptons, 1972  | box 64 | folder 4 |
| 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 |
| Particles IV - Institute for Advanced Study, n.d.                                  | box 66 | folder 1 |
| Particles V - Institute for Advanced Study, 1958                                   | box 66 | folder 2 |
| Pi, n.d.   | box 66 | folder 3 |
| Polaron - Institute for Advanced Study, n.d.                                       | box 66 | folder 4 |
| Potential Scattering - Rockefeller Institute, n.d.                                 | box 66 | folder 5 |
| Q Quant, n.d.  | box 66 | folder 6 |
| Quantum Mechanics, n.d.  | box 66 | folder 7 |

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|---|--------|----------|
| Recent Varia, n.d.  | box 67 | folder 1 |
| Relativiteits - Theorie, n.d.                               | box 67 | folder 2 |
| R Poles, n.d.   | box 67 | folder 3 |
| Seminars Etc., n.d.   | box 67 | folder 4 |
| SSGLA, n.d.   | box 67 | folder 5 |
| Statistical Mechanics I, 1935-1936                          | box 67 | folder 6 |
| Statistical Mechanics II, n.d.                              | box 67 | folder 7 |
| Statistics Problems - Institute for Advanced Study, n.d.    | box 68 | folder 1 |
| Strong Interactions (Institute for Advanced Study), 1963    | box 68 | folder 2 |
| Structure of Hadronic Currents, n.d.                        | box 68 | folder 3 |
| Structure Problems I - Institute for Advanced Study, n.d.   | box 68 | folder 4 |
| Structure Problems II - Institute for Advanced Study, 1953  | box 68 | folder 5 |
| Structure Problems III - Institute for Advanced Study, n.d. | box 68 | folder 6 |
| Structure Problems IV - Institute for Advanced Study, 1954  | box 68 | folder 7 |
| Structure Problems V - Institute for Advanced Study, 1954   | box 68 | folder 8 |
| Structure Problems VI, 1955                                 | box 69 | folder 1 |
| SU(6), 1964   | box 69 | folder 2 |
| Symm. Pscalar Theory - Institute for Advanced Study, n.d.   | box 69 | folder 3 |
| Theorie tan Dirac, 1937-1938                                | box 69 | folder 4 |
| Thermodynamica, n.d.  | box 69 | folder 5 |
| Varia, n.d.   | box 69 | folder 6 |
| Varia, 1967   | box 70 | folder 1 |
| Varia, n.d.   | box 70 | folder 2 |
| Vector Meson Theory, n.d.                                   | box 70 | folder 3 |
| Weak Interactions - Institute for Advanced Study, n.d.      | box 70 | folder 4 |
| Weak Interactions II, n.d.                                  | box 70 | folder 5 |
| In.d.   | box 70 | folder 6 |
| II, 1960  | box 70 | folder 7 |
| 8 eqn, n.d.   | box 71 | folder 1 |
| [Untitled Notebook], [1936]                                 | box 71 | folder 2 |
| [Untitled Notebook], [1936-1937]                            | box 71 | folder 3 |
| [Untitled Notebook], [1936-1937]                            | box 71 | folder 4 |

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|----------------------------------|--------|-----------|
| [Untitled Notebook], [1938-1939] | box 71 | folder 5  |
| [Untitled Notebook], [1944]      | box 71 | folder 6  |
| [Untitled Notebook], [1956-1957] | box 71 | folder 7  |
| [Untitled Notebook], [1963-1966] | box 71 | folder 8  |
| [Untitled Notebook], [1962]      | box 71 | folder 9  |
| [Untitled Notes], [1962-1970]    | box 71 | folder 10 |
| [Untitled Notes], [1962-1977]    | box 71 | folder 11 |
| [Untitled Notes], [1963-1970]    | box 72 | folder 1  |
| [Untitled Notebook], [1964-1970] | box 72 | folder 2  |
| [Untitled Notes], [1972]         | box 72 | folder 3  |
| [Untitled Notes 1], n.d.         | box 72 | folder 4  |
| [Untitled Notes 2], n.d.         | box 72 | folder 5  |
| [Untitled Notes 3], n.d.         | box 72 | folder 6  |
| [Untitled Notebook 4], n.d.      | box 73 | folder 1  |
| [Untitled Notebook 5], n.d.      | box 73 | folder 2  |
| [Untitled Notebook 6], n.d.      | box 73 | folder 3  |
| [Untitled Notebook 7], n.d.      | box 73 | folder 4  |
| [Untitled Notebook 8], n.d.      | box 73 | folder 5  |
| [Untitled Notebook 9], n.d.      | box 73 | folder 6  |
| [Untitled Notebook 10], n.d.     | box 73 | folder 7  |
| [Untitled Notebook 11], n.d.     | box 73 | folder 8  |
| [Untitled Notebook 12], n.d.     | box 73 | folder 9  |
| [Untitled Notebook 13], n.d.     | box 74 | folder 1  |
| [Untitled Notebook 14], n.d.     | box 74 | folder 2  |
| [Untitled Notebook 15], n.d.     | box 74 | folder 3  |
| [Untitled Notebook 16], n.d.     | box 74 | folder 4  |
| [Untitled Notebook 17], n.d.     | box 74 | folder 5  |
| [Untitled Notebook 18], n.d.     | box 74 | folder 6  |
| [Untitled Notebook 19], n.d.     | box 74 | folder 7  |
| [Untitled Notebook 20], n.d.     | box 74 | folder 8  |
| [Untitled Notebook 21], n.d.     | box 74 | folder 9  |
| [Untitled Notebook 22], n.d.     | box 74 | folder 10 |

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| [Untitled Notebook 23], n.d. | box 74 | folder 11 |
| [Untitled Notebook 24], n.d. | box 74 | folder 12 |
| [Untitled Notebook 25], n.d. | box 74 | folder 13 |
| [Untitled Notebook 26], n.d. | box 75 | folder 1  |
| [Untitled Notebook 27], n.d. | box 75 | folder 2  |

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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.

| Title/Description                        | Instances |           |
|--|-----------|-----------|
| Autobiography Material, 1937-1960        | box 75    | folder 3  |
| Autobiography - Originals, ca. 1928-1997 | box 75    | folder 4  |
| Autobiography Pictures, ca. 1928-1988    | box 75    | folder 5  |
| [Child Holding a Ball], n.d.             | box 75    | folder 6  |
| [Children Playing on Steps], n.d.        | box 75    | folder 7  |
| Family Pictures, 1953-1956, n.d.         | box 75    | folder 8  |
| Dr. Pais, n.d.                           | box 75    | folder 9  |
| Dubna, 1965                              | box 75    | folder 10 |
| Einstein Book Pictures, 1930, n.d.       | box 75    | folder 11 |
| Pictures, 1940, 1948, n.d.               | box 75    | folder 12 |
| 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  |



|   |        |           |
|---|--------|-----------|
| Family Pictures, n.d.   | box 76 | folder 1  |
| Family Photos, 1962, n.d.   | box 76 | folder 2  |
| Fermilab National Accelerator Laboratory, n.d.  | box 76 | folder 3  |
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