Edwin Powell Hubble Papers: Finding Aid

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Overview of the Collection

Title: Edwin Powell Hubble Papers
Dates (inclusive): 1900-1989
Collection Number: mssHUB 1-1098
Extent: 1300 pieces, plus ephemera in 34 boxes
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Abstract: This collection contains the papers of Edwin P. Hubble (1889-1953), an astronomer at the Mount Wilson Observatory near Pasadena, California, as well as the diaries and biographical memoirs of his wife, Grace Burke Hubble.

Language: English.

Access
Open to qualified researchers by prior application through the Reader Services Department. For more information, contact Reader Services.

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Preferred Citation
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Provenance
Gift of the estate of Grace Burke Hubble, 1980.

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Biographical Note
Edwin Powell Hubble, an observational astronomer, was born November 20, 1889, in Marshfield Missouri. He attended the University of Chicago (1906-1910), where he studied physics and astronomy, and at Queen's College, Oxford University, where, as a Rhodes Scholar, he received a B.A. in Jurisprudence in 1912. After a year as a high school teacher in New Albany, Indiana, Hubble returned to the University of Chicago in 1914 to do graduate work in astronomy under Edwin Brant Frost at the Yerkes Observatory. Completing his Ph.D. in 1917, Hubble immediately joined the U.S. Army, serving as an officer in the infantry from 1917 to 1919. In 1919, Hubble joined the staff of the Mount Wilson Observatory, a position he held until his death on September 28, 1953. Hubble married Grace Burke, a graduate of Stanford University, on February 26, 1924.

Although Hubble's earliest astronomical observations concerned galactic nebulae, from 1922 on Hubble began to use the 100-inch reflector at the Mount Wilson Observatory to view what are now called galaxies (Hubble used the term "extragalactic nebulae"). In 1924, Hubble published "Cepheids in Spiral Nebulae," which contained the first observational evidence that the nebulae were beyond our own stellar system. In 1926, Hubble presented a system for the classification of galaxies (elliptical, spiral, barred spiral, or irregular). The classification system still in use is based upon the scheme proposed by Hubble. By the late 1920s Hubble began to focus his attention on the determination of an extragalactic distance scale. Combining twenty-four distances he had calculated with the corresponding redshifts, Hubble discovered a linear relation between the distance of distant galaxies and their speeds of recession from us. This relation, known as Hubble's Law, provided the first observational evidence of the expansion of the universe and supported what others had predicted on the basis of Einstein's theory of general relativity. In the 1930s, Hubble studied the distribution of galaxies in the sky and discovered that their distribution was uniform, a conclusion which supported the argument that galaxies are the framework of the universe.

Hubble's astronomical career was interrupted by World War II. From 1942 to 1946 he served as Chief of Ballistics and Director of the Supersonic Wind Tunnels Laboratory at the Ballistics Research Laboratories, Aberdeen Proving Ground.
Maryland. For this service, Hubble was awarded the Medal of Merit. After the war, Hubble returned to the Mount Wilson Observatory where he became Chairman of the Mount Wilson and Palomar Observatories Research Committee. Hubble spent much of his time on plans for the use of the 200-inch Hale Telescope, which he was the first to use.

In addition to his observational astronomy, Hubble pursued other interests. An avid student of the history of science and philosophy as well as an ardent Anglophile, Hubble was elected Trustee of the Henry E. Huntington Library and Art Gallery upon the death of George Ellery Hale in 1938. In the 1930s, Hubble recognized the inevitability of war with Germany and in the months before the U.S. entered the war he used his notoriety and powers as a public speaker to urge U.S. participation on the side of the United Kingdom. Also an ardent and skilled dry fly fisherman, Hubble spent many vacations in the Rocky Mountains and on the banks of the River Test in England.

Scope and Content

This collection contains the papers of Edwin P. Hubble and includes manuscripts and reprints of his articles, papers, public lectures, addresses, etc., scientific documentation for his papers, logbooks of photographic plates taken by Hubble at Mount Wilson and Palomar Observatories, diaries and biographical memoirs of his wife Grace Burke Hubble, professional, personal, and social correspondence, photographs, medals and awards, a scrapbook assembled by Grace Hubble, newspaper clippings, etc.

Arrangement

The collection is arranged in the following 6 series:
- Manuscripts (Boxes 1-8) (HUB 1-90, 1097)
- Correspondence (Boxes 9-20) (HUB 91-1031, 1083-88)
- Photographs (Boxes 21-22A and oversize folder) (HUB 1032-1082, 1089-1096, 1098)
- Ephemera (Boxes 23-27)
- Logbooks (Box 29)
- Astronomical Working Papers (Addenda Boxes 1-5)

Indexing Terms

The following terms have been used to index the description of this collection in the Huntington Library's Online Catalog.

Subjects
- Hubble, Grace Burke, -1980 -- Archives.
- Henry E. Huntington Library and Art Gallery -- Officials and employees -- Archives.
- Mount Wilson Observatory -- History -- Sources.
- Palomar Observatory -- History -- Sources.
- Astronomers -- United States -- Archives.
- Astronomy -- Research.
- Scientists -- United States -- Archives.
- Space sciences -- Research -- United States.
- United States -- Intellectual life -- 20th century -- Sources.

Forms/Genres
- Diaries United States 20th century.
- Family papers United States 20th century.
- Letters (correspondence) United States 20th century.
- Logs (records) United States 20th century.
- Personal papers United States 20th century.
- Professional papers United States 20th century.
- Research (document genres) United States 20th century.

Additional Authors
Arranged alphabetically by author, the manuscripts consist primarily of Edwin Hubble's writings. The majority of Hubble's own manuscripts deal with scientific subjects. They include some unpublished articles about Adriaan van Maanen's work and papers discussing the history, philosophy, and nature of science. Also among the Hubble manuscripts are many of his public lectures on such topics as astronomy, smog, war preparedness, and fly-fishing.

Grace Hubble was a faithful chronicler of Hubble's life during their marriage and after his death. In diaries and journals, she described daily happenings at home in San Marino, Calif., and vacations in Colorado, Arizona, the East Coast, Great Britain, and Europe. These diaries discuss the Hubbles' activities, friends, acquaintances, and people they met on their travels. After Hubble's death, Mrs. Hubble prepared rough biographical memoirs of her husband. Divided into topical chapters, the notes and short essays include transcripts of some early Hubble correspondence which is not available elsewhere in the collection. These journals and memoirs supplement the more public record of Hubble’s life provided by his own papers.

Also included with the manuscripts are several articles and poems about Hubble, written by family, friends, and colleagues: Helen Hubble Lane, Susan Ertz, Aldous Leonard Huxley, Anita Loos, Milton Humason, Nicholas Ulrich Mayall, and Edward John Moreton Plunkett, 18th Baron Dunsany.

Box 1

Manuscripts: A - Hubble, E. P. (A - H) (HUB 1-34, 277)

HUB 277 Max Farrand. [Notes on Caltech commencement address, ?Experiment and Experience,? 1938, by Edwin Powell Hubble].
HUB 5 W. Parmer Fuller, Jr. To Grace [(Burke) Hubble: Itinerary of High Sierra trip, 1932]. Dec. 6, 1960.
HUB 12 E[dwin] P[owell] H[ubble]. Civilian Scientists and the Ballistic Research Laboratory. [1942?].
HUB 14 [Edwin Powell Hubble]. Direct Surveys with the 48-inch Schmidt: [Outline of observing program]. [1947?].
HUB 15 [Edwin Powell Hubble]. Dispersion in Counts of Nebulae. [1937<>1953].
HUB 17 [Edwin Powell Hubble]. Distinction Between the Manner in Which a Star Image and the Image of a Nebulous Spot Builds up on the Photographic Plate. [Aug. 1924].
HUB 18 [Edwin Powell Hubble]. Early References to Fly-Fishing. [c. 1950].
HUB 19 [Edwin Powell Hubble]. [Early References to Fly-Fishing: translation of Aelian's passage on fly-fishing from his *Natural History*]. [c. 1950].
HUB 22 [Edwin Powell Hubble]. [Examination in Latin Prose for Rhodes Scholarship, 1st draft]. [1910?].
HUB 28 [Edwin Powell Hubble]. Extragalactic Research with the 200-inch Reflector. 1946.
HUB 34 [Edwin Powell Hubble]. Herschel's 40-foot [telescope]. [1925<>1953].

Box 2
Manuscripts: Hubble, E. P. (I P) (HUB 35-38)

Box 3
Manuscripts: Hubble, E. P. (R Y) (HUB 49-71)

Box 4
Manuscripts: Hubble, G. B. (Diaries) (HUB 72-74)

Box 5
Manuscripts: Hubble, G. B. (Diaries) (HUB 75-77)

Box 6
Manuscripts: Hubble, G. B. (Diaries) (HUB 78-81)
Box 7

Manuscripts: Hubble, G. B. (Biographical Memoir) (HUB 82(1-9))

- HUB 82(1) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Family History, 9 pp.
- HUB 82(3) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Oxford University, 1910-1913, 35 pp.
- HUB 82(4) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: World War I, 19 pp.
- HUB 82(7) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: The Astronomer, 78 pp.
- HUB 82(8) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Bibliography, 28 pp.
- HUB 82(9) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Characteristics, 74 pp.

Box 8

Manuscripts: Hubble, G. B. (Biog. Memoir) - Z (HUB 82(10-17), 90, 1097)

- HUB 82(10) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: High Sierra, Grand Canyon, 11 pp.
- HUB 82(11) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Lecturer, 39 pp.
- HUB 82(13) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Quotations, 39 pp.
- HUB 82(14) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: September, 1953 [Death], 5 pp.
- HUB 82(15) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Writing and Style, 9 pp.
- HUB 82(16) EDWIN POWELL HUBBLE, A BIOGRAPHICAL MEMOIR BY GRACE BURKE HUBBLE: Nicolas Copernicus (cat), 10 pp.
Correspondence

Scope and Content Note

It appears that Hubble was hardly obsessed with saving his correspondence. Only a few letters from the 1920s and 30s survive, but many of these are scientifically important. Included in this group are letters to and from Harlow Shapley, Vesto Melvin Slipher, Willem de Sitter, Henry Norris Russell, Arthur Stanley Eddington, Joel Stebbins, and Otto Struve. There is also an important run of correspondence with Nicholas Ulrich Mayall dating from the early 1930s, regarding the surveys of galaxies made by the two men. Many of Hubble's later letters are carbon copies made from the files of the Mount Wilson Observatory; these letters date from the mid-1940s and are mainly routine. Hubble's only extant personal correspondence was addressed to his wife during 1942 and 1943 when Hubble worked at the Aberdeen Proving Grounds in Maryland and Mrs. Hubble was still in California. The spotty nature of Hubble's own correspondence was explained by Mrs. Hubble: "He had a reticence that demanded privacy from the public."

Most of the personal correspondence in the collection is addressed to Grace Hubble, although a few letters are addressed to her husband. The Hubbles' social circle included a number of persons with whom Edwin Hubble was not professionally associated. Many of these individuals were English--some Edwin Hubble met at Oxford and some the Hubbles met in Hollywood in the 1930s. Friends and acquaintances with whom there is significant correspondence include the Robert Gore-Brownes, Sir Charles Richard Fairey, Henry Herbert Gordon Clark, Philip Henry Kerr (Lord Lothian), Sir Hugh Walpole, Aldous and Maria (Nys) Huxley, Harold Marsh and Fryniwyd Tennyson Jesse Harwood, Frieda (von Richtofen) Lawrence, George Arliss, and Anita Loos.

The correspondence is arranged alphabetically by author and addressee. Letters from one individual to another are ordered chronologically. Within the correspondence are scientific, routine business, and some personal letters written by and addressed to Edwin Hubble, letters to Grace Hubble primarly from literary and show business personalities the Hubbles knew socially, and letters of condolence upon the death of Hubble.

Persons represented by five or more pieces or significant items listed.

Box 9

Correspondence: A - Be (HUB 91-170)

HUB 111-117 American Philosophical Society. To Edwin Powell Hubble. 1950-1951.7 letters and telegrams
HUB 122-134 Arliss, George. To Grace (Burke) Hubble. 1933-1944.13 A.Ls.S.
HUB 135-142 Arliss, George. To Grace (Burke) Hubble & Edwin Powell Hubble. 1931-1945.8 letters

Box 10

Correspondence: Bi - D (HUB 171-251)

HUB 182-187 Bryan, Sue. To Grace (Burke) Hubble. 1949-1954.6 letters.

Box 11

Correspondence: E - Hart-Davis (HUB 252-276, 278, 280-314)

HUB 292-297 Gore-Browne, Robert Francis. To Grace (Burke) Hubble & Edwin Powell Hubble. 1940-1945.6 A.Ls.S. Description of service with British Intelligence in France before its fall, in North Africa (including Egypt). at the Teheran Conference, and during the invasion of Italy.

Box 12

Correspondence: Harwood - Hoyle (HUB 315-394)

HUB 334-339 Harwood, Fryniwyd Tennyson (Jesse). To Grace (Burke) Hubble & Edwin Powell Hubble. 5 Ls.S. (typewritten).
HUB 380-388 Hoskin, Michael A. To Grace (Burke) Hubble. 1967-1971.9 Ls.S.

Box 13

Correspondence: Hubble, E. P. (A - H) (HUB 395-489)
Correspondence

HUB 457-488 Hubble, Edwin Powell. To Grace (Burke) Hubble. 1938-1953, Oct. 28.28 A.L.s.S. & 4 telegrams. Because Hubble and his wife were rarely separated and because Hubble was a private person, these letters written from the Aberdeen Proving Ground are among the few that provide an insight into Hubble's relationship with his wife.

Box 14

Correspondence: Hubble, E. P. (I - N) (HUB 490-574)


Box 15

Correspondence: Hubble, E. P. (O - Z) (HUB 575-666)

HUB 606-610 Hubble, Edwin Powell. To Charles Donald Shane. 1948-1952.5 letters.
HUB 620 Hubble, Edwin Powell. To Vesto Melvin Slipher. 1923, July 24.Wants comments on his preliminary system of nebular classification.

Box 16

Correspondence: Hubble, G. B. - K (HUB 667-745, 1083)

HUB 681-704, 1083 Huxley, Maria (Nys). To Grace (Burke) Hubble. 1938-1953.25 letters. The Huxley letters describe the lives of the Huxleys and their friends, Gerald Heard and Anita Loos.
HUB 733-739 Kerr, Philip Henry, 11th Marquess of Lothian. To Edwin Powell Hubble. 4 letters & 3 telegrams.

Box 17

Correspondence: L - Mar (HUB 746-807, 1088)

HUB 759-793 Loos, Anita. To Grace (Burke) Hubble. 1936-1961.36 letters. Chatty letters about the Huxleys, show business personalities such as Carol Channing, life in Hollywood and New York City.

Box 18

Correspondence: May - P (HUB 808-892)

HUB 808-827 Mayall, Nicholas Ulrich. To Edwin Powell Hubble. 1933-1953.20 letters.
HUB 828-832 Mayall, Nicholas Ulrich. To Grace (Burke) Hubble. 1953-1967.4 letters and 1 note.

Box 19

Correspondence: Q - S (HUB 893-965)


Box 20

Correspondence: T - Z (HUB 279, 966-1031)

HUB 988-1002 Walpole, Sir Hugh Seymour. To Grace (Burke) Hubble. 1934-1941.15 letters.

Photographs

HUB 1032-1050 and 1089-1096 are portraits and candid shots of Hubble, taken from his childhood to his last years at various places where he lived and worked. Photographs of Grace (Burke) Hubble are also included in this set. HUB 1051-1082 are photographs of other individuals associated with the Hubbles. Included are Walt Disney, Albert Einstein, Aldous and Maria (Nys) Huxley, Sir Arthur Stanley Eddington, etc. Edwin and Grace Hubble appear in several of these photographs.

A blue binder containing photocopies of the prints of the photographs is also included in the collection. When an asterisk appears on the list, at least one of the photographs described is in the folder of oversize photographs.

Box 21

Photographs of Edwin Powell Hubble: (HUB 1032-1039)

- HUB 1032* 3 studio portraits. Carmel, 1931.
- HUB 1033 12 portraits. c.1906-1950.
- HUB 1037 1 with his cousins. c.1900.
- HUB 1038* 4 at the University of Chicago. 1906-1910.
- HUB 1039* 6 at Oxford University. 1910-1913.

Box 21A

Photographs of Edwin Powell Hubble: (HUB 1040-1045) and Grace (Burke) Hubble (HUB 1046-1047)

- HUB 1040 2 around World War I. c.1919.
- HUB 1041 1 with his sister during World War I. c.1918.
- HUB 1042* 8 making astronomical observations. 1923-1950.
- HUB 1043 8 at the Ballistic Research Laboratories, Aberdeen, Md. 1942-1945.
- HUB 1045 6 of rented house on Spesutie Island, Md. 1942-1945
- HUB 1046 10 candid of Grace (Burke) Hubble. 1910-c.1950.
- HUB 1047 1 studio portrait of Grace (Burke) Hubble. Carmel, 1931.

Box 22

Photographs of Grace (Burke) Hubble: (HUB 1048-1069)

- HUB 1048 15 with Edwin Powell Hubble. 1924-1952.
- HUB 1050* 3 of house in San Marino. c.1930.
- HUB 1051 2 of George Arliss. c.1938.
- HUB 1052 4 of Betty or Gary Baldwin with the Hubbles. 1933-1937.
- HUB 1053* 1 of portrait of Julian Hedworth George Byng, 1st Viscount Byng of Vimy, c.1935.
- HUB 1054 1 of Walter Elias Disney, Edwin Powell Hubble, and Sir Julian Huxley. 1940.
- HUB 1055 1 of portrait of Sir Arthur Stanley Eddington, by Augustus John. c.1935
- HUB 1057 1 of Albert Einstein, Edwin Powell Hubble, and Walter Sydney Adams at the 100-inch Hooker Telescope. Mt. Wilson, 1931.
- HUB 1060 1 of Edward Curtis Franklin and Edwin Powell Hubble. 1931.
- HUB 1061 2 of Edwin Powell Hubble [with others] at award of Franklin Medal. 1939, May 17.
- HUB 1062 1 of F. Parmer Fuller, Adaline Fuller, Edwin Powell Hubble, and Grace (Burke) Hubble on camping trip. 1932.
Photographs

HUB 1063 1 of Henry Herbert Gordon-Clark fishing on the River Test. 1935

HUB 1064 1 of Robert Francis Gore-Browne, Agnes Margaret (Elias) Gore-Browne, Edwin Powell Hubble, and Grace (Burke) Hubble.

HUB 1065 1 of Harold Marsh Harwood and Fryniwyd Tennyson (Jesse) Harwood. c.1935?


HUB 1067 3 portraits of Aldous Leonard Huxley. c.1942-1953?

HUB 1068 1 of Aldous Leonard Huxley, Christopher Isherwood, John Emerson, and Edwin Powell Hubble. c.1935?

HUB 1069 2 of Aldous Leonard Huxley and Edwin Powell Hubble. c.1935?

Box 22A

Photographs (HUB 1070-1082, 1089-1096, 1098)

HUB 1070 1 of Maria (Nys) Huxley. 1949.

HUB 1071 1 of Aldous Leonard Huxley, Maria (Nys) Huxley, Edwin Powell Hubble, Grace (Burke) Hubble, Christopher Isherwood, and John Emerson. c.1935?

HUB 1072 1 of Aldous Leonard Huxley, Maria (Nys) Huxley, and their niece from Paris, Sophie.

HUB 1073 1 of Sir James Hopwood Jeans and Edwin Powell Hubble at the 100-inch Hooker Telescope. Mt. Wilson. 1931?

HUB 1074 1 of Guy Knowles, from a painting by Sir Gerald Kelly.

HUB 1075 1 of Frieda (von Richtofen) Lawrence. Taos, New Mex., c.1952.

HUB 1076 2 of sketches of Anita Loos, one by Rene BouchT, and one by Douglas Matthew Davis.

HUB 1077 1 of Ramon Novarro, Edwin Powell Hubble, William Harrison Hayes, and two unidentified persons. c.1935?

HUB 1078 1 of Richard Chance Tolman and Edwin Powell Hubble, with model of proposed 200-inch telescope for the California Institute of Technology. Pasadena, 1931, June 15.

HUB 1079 1 of Sir Hugh Seymour Walpole. 1935, Dec


HUB 1081 1 photograph of a prospector and a priest outside San Xavier del Bach Mission near Tucson, Ariz.

HUB 1082 13 miscellaneous photographs.

HUB 1089 1 snapshot of Edwin Powell Hubble taken in Shelbyville, Ky. c.1910.


HUB 1091 1 of Edwin Powell Hubble with brother William, sister Lucy, and a niece on the porch of the Barringer home in Shelbyville, Ky. c.1910.

HUB 1092 3 of Edwin Powell Hubble from the pages of The Senior Blotter, the 1914 yearbook of New Albany High School.

HUB 1093 1 of Edwin Powell Hubble looking through a small refracting telescope in the driveway of the Roberts home in New Albany, Ind. c.1914.

HUB 1094 1 of Edwin Powell Hubble with members of the Roberts family. New Albany, Ind. c.1914.

HUB 1095 1 of Edwin Powell Hubble with Jack Roberts in Wyandotte Cave, Harrison County, Ind. c.1914.

HUB 1096 8 of Edwin Powell Hubble with companions on hiking trips around southern Indiana. c.1914.

HUB 1098 1 of pages 156-157 from Edwin Powell Hubble's first logbook of plates taken with the 100-inch Hooker Telescope (in Box 29). Page 157 contains Hubble's note of the discovery of a cepheid variable in M31.
Ephemera

Scope and Content Note
Included in the ephemera are reprints which consist primarily of Hubble's scientific articles, a scrapbook compiled by Grace Hubble which contains newspaper clippings and some other memorabilia chronicling Hubble's life from his high school years to his death, miscellaneous biographical material, magazine articles about Hubble, a scientific biography (in Russian) of Hubble, and Hubble's medals and awards

Reprints and Journal Articles by Edwin Powell

Box 23
Folder 1

Reprints and Journal Articles, A-P

A-D


Folder 2

E


Folder 3

F-K


Folder 4

L-M

The Motion of the Galactic System Among the Nebula (Reprinted from *Journal of the Franklin Institute*, 228: 131-42, 1939). Also a copy of the journal.

Folder 5

N

The Nature of the Nebulae (Reprinted from the *Smithsonian Report for 1938*, pp. 137-48).

Folder 6

O-P

O'er the Ramparts We Watch. Text of an address...before the American Legion, Pasadena, California, Armistice Day, 1941.

Box 24

Reprints and Journal Articles, R-Z

Folder 1

R


Folder 2

S


Folder 3

**T-Z**


Folder 4


Folder 5

U.S. Proving Ground, Aberdeen, Md. Ballistic Research Laboratories

Some Recent Advances in Ballistics (Two copies, reprinted from *J. Applied Physics*, 16: 773-80, 1945).


On the Pure Rolling Motion of Winged and/or Finned Missiles in Varying Supersonic Flight, by John D. Nicolaides and Ray E. Bolz. Report No. 799


The High-Speed Flexible-Throat Supersonic Wind Tunnel. c.1948.

Folder 6

Miscellaneous Reprints and Reports (10 items)

Box 25

Biographical Material; Books; Invitations; Clippings; Obituaries; Miscellany

Folder 1

Biographical Material -- E.P.H.

Folder 2

Books -- Announcements, Reviews, etc. -- E.P.H.

Folder 3

Invitations, Programs, etc. -- E.P.H.

Folder 4

Newspaper and Magazine Clippings -- Astronomy

Folder 5

Newspaper and Magazine Clippings -- Friends

Folder 6

Obituaries -- E.P.H.

Folder 7

Miscellany

Box 26

Magazine Articles and biography in Russian

Magazine Articles -- Astronomy & E.P.H.


Box 27

Medals and Awards

Box 28

Scrapbook

Oversize Folder 2

Diplomas and other citations received by Edwin Powell Hubble

Logbooks
3 Logbooks of Plates Taken by Edwin Powell Hubble at Mount Wilson and Palomar Observatories.

Volume 1

Logbook of plates. 1919-1933

Logbook of plates taken with:

- 60" telescope from Oct. 25, 1919 to Nov. 24, 1924 (S-1-H to S-416-H).
- Kodak Lens from Oct. 18, 1919 to July 30/31, 1921 (K-1-H to K-79-H).
- Tessar Lens from July 28, 1922 to May 20, 1931 (t-1-H to t-69-H).
- 4" Voigtlander from Nov. 13/14, 1919 to June 21, 1920 (F-1-H to F-18-H).

Volume 2

Logbook of plates. 1925-1949

Logbook of plates taken with:


Volume 3

Logbook of plates. 1949-1953

Logbook of plates taken with:


Astronomical Working Papers 1925-1929

Scope and Content Note

This section contains almost complete documentation for Hubble's three papers on cepheids (Messier 31, Messier 33, and N.G.C. 6822) published from 1925 to 1929, for his 1930 paper, "The Distribution of Luminosity in Elliptical Nebulae," and for his 1934 paper on the distribution of galaxies in space. Much of the data Hubble compiled in checking Adriaan van Maanen's conclusions concerning the angular rotations of spiral nebulae is also here. There are a few finding charts for clusters of galaxies which were utilized in Hubble's calculation of the velocity-distance relation among extragalactic nebulae. In addition, several star charts and other telescopic photographs have been preserved. The astronomical working papers were organized with the assistance of Dr. Allan Sandage, a former colleague of Hubble's and astronomer at the Carnegie Observatories. The papers have been arranged chronologically according to the particular scientific paper produced from them. The data for each paper is randomly ordered, but the verso of each piece has been numbered in pencil.

1925-1929

- 1926. "A Spiral Nebula as a Stellar System: Messier 33"
- 1929. "A Spiral Nebula as a Stellar System: Messier 31"

1930

- 1930. "The Distribution of Luminosity in Elliptical Nebulae"

1931-1934

- 1931. "The Velocity-Distance Relation Among Extra-Galactic Nebulae"
- 1934. "The Velocity-Distance Relation for Isolated Extra-Galactic Nebulae"
- 1934. "The Distribution of Extra-Galactic Nebulae"

1934-1939

- 1934. "The Distribution of Extra-Galactic Nebulae"
- 1935. "Angular Rotations of Spiral Nebulae" & other unpublished manuscripts re van Maanen controversy
<table>
<thead>
<tr>
<th>Folder</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folder 24</td>
<td>1936. &quot;Effects of Red Shifts on the Distribution of Nebulae&quot;</td>
</tr>
<tr>
<td>Folder 25</td>
<td>1939. &quot;The Motion of the Galactic System Among the Nebulae&quot;</td>
</tr>
<tr>
<td>Box Addenda 5</td>
<td>Miscellaneous Star Charts and Other Photographs</td>
</tr>
<tr>
<td>Folder 27</td>
<td>Faint Galaxies -- Finding chart</td>
</tr>
<tr>
<td>Folder 28</td>
<td>Hydra Cluster -- Spectrum illustrating largest red shift ever obtained</td>
</tr>
<tr>
<td>Folder 29</td>
<td>Los Angeles lights photographed from Mt. Wilson</td>
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<tr>
<td>Folder 30</td>
<td>Messier 31 &amp; Messier 33 -- wide angle finding chart</td>
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<tr>
<td>Folder 31</td>
<td>Nuclear Spectra</td>
</tr>
<tr>
<td>Folder 32</td>
<td>The Realm of the Nebulae -- Plate VI</td>
</tr>
<tr>
<td>Folder 33</td>
<td>Star Spectra -- Hot versus cool stars</td>
</tr>
<tr>
<td>Folder 34</td>
<td>Oversize Finding Charts Removed from Addenda Box 3, Folder 15</td>
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<tr>
<td>Box Oversize</td>
<td>Oversize manuscripts and correspondence (HUB 181, 295, 375, 376, 893, 1028, and 1033(11))</td>
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