
Inventory of the Sandra M. Faber Papers

Collection number: UA 35

The University Library
University Archives
University of California, Santa Cruz
Santa Cruz, California

Processed by:
UCSC OAC Unit

Date Completed:
August 2005

Encoded by:
UCSC OAC Unit

© 2005 The Regents of the University of California. All rights reserved.

Descriptive Summary

Title: Sandra M. Faber papers

Dates: 1968-1997

Collection number: UA 35

Creator: Faber, Sandra M.

Collection Size: 42 linear ft.
76 half cartons

Repository: University of California, Santa Cruz. University Library. University Archives
Santa Cruz, California 95064

Abstract: This collection contains correspondence, notes, papers, reports, minutes, articles, charts, tables, scan data sheets and maps, and photographs relating to Faber's research on the structure, formation and evolution of galaxies and stars since joining the faculty at UCSC Lick Observatory in 1972. Included also is material documenting her involvement with Hubble Space Telescope and the W.M. Keck Observatory projects. A portion of the papers contain manuscript pages, diagrams and other supportive material to Faber's thesis (Ph. D.), "Photometry of Elliptical Galaxies in Multiple Systems", completed at Harvard University, 1971.

Physical location: Stored offsite at NRLF: Advance notice is required for access to the papers.

Languages: Languages represented in the collection: English

Access

Collection open for research.

Publication Rights

Property rights reside with the University of California. Literary rights are retained by the creators of the records and their heirs. For permission to publish or to reproduce the material, please contact the Head of Special Collections and Archives.

Preferred Citation

Sandra M. Faber papers. UA 35. University Archives, University Library, University of California, Santa Cruz.

Acquisition Information

Materials gifted and transferred by Sandra M. Faber in 2001.

Biography

Astronomer Sandra Faber, a University Professor of astronomy and astrophysics, was elected to the American Philosophical Society on April 29. The learned society, founded in 1743 by Benjamin Franklin, honors extraordinary accomplishments in all fields.

Faber was one of three scientists who diagnosed a flaw in the Hubble Space Telescope's mirror. Faber is renowned for her research on the formation and evolution of galaxies and the evolution of structure in the universe. She has made significant scientific contributions in the areas of structure and formation of elliptical galaxies; the nature, compositions, and motions of stars within a galaxy as related to their ages; and the streaming motions of large numbers of galaxies. Important concepts such as "cold dark matter" and the "Great Attractor" are direct results of work by Faber and her colleagues.

Two of the major optical astronomy ventures of recent years have benefited from Faber's involvement: the Hubble Space Telescope and the W. M. Keck Observatory. She was one of three scientists who diagnosed a flaw in the Hubble's mirror and later helped craft the strategy for a successful repair mission. She is a member of Hubble's wide field/planetary camera team, which directs many of the telescope's most striking observations. In addition, for nearly two decades Faber has helped plan and develop the Keck Observatory in Hawaii, home to the world's largest optical and infrared telescopes.

Faber's many honors include election to both the National Academy of Sciences and the American Academy of Arts and Sciences. In 1995, she was appointed University Professor, the highest honor for faculty in the UC system.

Faber earned her B.A. in physics from Swarthmore College and her Ph.D. in astronomy from Harvard University. She joined the faculty of UCSC and the UC Observatories/Lick Observatory in 1972.

Scope and Content of Collection

This inventory contains correspondence, notes, papers, reports, minutes, articles, charts, tables, scan data sheets and maps, and photographs relating to Faber's research on the structure, formation and evolution of galaxies and stars since joining the faculty at UCSC Lick Observatory in 1972. Included also is material documenting her involvement with Hubble Space Telescope and the W.M. Keck Observatory projects. A portion of the papers contain manuscript pages, diagrams and other supportive material to Faber's thesis (Ph.D.), "Photometry of Elliptical Galaxies in Multiple Systems", completed at Harvard University in 1971.

Indexing Terms

The following terms have been used to index the description of this collection in the library's online public access catalog.

Faber, S.M. (Sandra M.)--Archives

University of California, Santa Cruz--Astronomy and Astrophysics

Hubble Space Telescope (Spacecraft)

W. M. Keck Observatory

Space Telescope Science institute (U.S.)

University of California, Santa Cruz--Center for Adaptive Optics

Lick Observatory

Astronomy--Research--United States

Cosmology

Expanding universe

Big bang theory

Box 1-4 **Image disectomy - scanner data 1972-1997**

Box 5-8 **Early Keck history - Keck Science Steering Committee [SSC] 1986-1993**

Box 9-12 **Keck Science Steering Committee [SSC] 1980-1992**

Box 13-17 **General Files - including California Council of Science & Technology [CCST], Santa Cruz Institute for Particle Physics [SCIPP] 1990-1995**

Box 18-19 **Rotation 1968-1976**

Box 20-21 **Tinsley fund 1971-1985**

-
- Box 22-25 **Lighting 1973-1992**
- Box 26-27, 69-72 **Thesis 1969-1971**
- Box 28 **Low Resolution Imaging Spectrometer, etc. [LRIS] 1988-1995**
- Box 29, 32 **Proposals 1988-1996**
- Box 30 **Space Telescope Science Institute [STSci] 1982-1985**
- Box 31-32 **People files 1982-1996**
- Box 33 **E & SO galaxy nuclei, Northern spirals 1989-1990**
- Box 34 **NA 8190, etc. 1990**
- Box 35 **E galaxies, E Collaboration, etc. 1977-1984**
- Box 36 **E Collaboration, SO project, HI profiles, etc. 1987**
- Box 37-40, 45 **Ten-Meter Telescope [TMT] 1977-1992**
- Box 41 **Misc. files - includes N1052, cD galaxies, M dwarfs, etc. 1977-1980**
- Box 42-43 **HI in galaxies, etc. 1974-1980**
- Box 43 **Post doctoral applicants 1974-1989**
- Box 44, 50-51 **National Radio Astronomy Observatory [NRAO], Space Telescope [ST], Wide Field/Planetary Camera [WF/PC], etc. 1976-1994**
- Box 46-49 **Velocity Dispersions (Lick IDS Data) ca. 1985-1996**
- Box 52-62 **Email 1992-1997**
- Box 63-65 **Science Steering Committee [SCC] Minutes 1988-1993**
- Box 66 **Deep Extragalactic Evolutionary Probe Project [DEEP], Deep Extragalactic Imaging Multi Object Spectrograph project [Deimos] ca. 1985-1995**
- Box 67 **Science notebooks including HI in early type galaxies, Steward clouds, Magellanic clouds, M31 GLobulars, Planetary Spectra, AY 240A 1969-1971**
- Box 68 **Orbital verification/ Science Verification [OV/SV], Wide Field/Planetary Camera [WF/PC], v.1-2, etc. 1969-1971**
- Box 73 **Science Steering committee [SSC] 1988-91**
- Box 74 **HIRES: A High Resloution Echelle Spectrometer for the Keck Ten-Meter Telescope including proposals 1983-1994**
- Box 75-76 **Proposal 2600: Cores of Early Type Galaxies - includes Faculty research grants; [WF/PC] CalTech Wide field Planetary Camera, 1985-98; Carnegie Institution of Washington, 1984-87 1982-1998**
-