



Smithsonian

National Air and Space Museum

Vera Rubin Digital Images

Jessamyn Lloyd and Melissa Keiser

2020

National Air and Space Museum Archives
14390 Air & Space Museum Parkway
Chantilly, VA 20151
NASMRefDesk@si.edu
<https://airandspace.si.edu/archives>

Table of Contents

Collection Overview	1
Administrative Information	1
Biographical / Historical.....	2
Scope and Contents.....	2
Arrangement.....	2
Names and Subjects	2
Container Listing	

Collection Overview

Repository:	National Air and Space Museum Archives
Title:	Vera Rubin Digital Images
Date:	2007
Identifier:	NASM.2020.0033
Creator:	DeVorkin, David H., 1944-
Extent:	0.06 Gigabytes (4 digital images)
Language:	Not applicable.
Summary:	Vera Florence Cooper Rubin (1928-2016) was an American astronomer whose work provided clear, observational evidence of the existence of dark matter. This collection consists of four born digital images of astronomer Vera Rubin, seated at her desk with papers relating to her discovery of dark matter, during an oral history interview conducted by Smithsonian National Air and Space Museum (NASM) curator David H. DeVorkin and NASM intern Ashley Yeager in Rubin's office.
Digital Content:	Image(s): Vera Rubin Digital Images

Administrative Information

Acquisition Information

NASM Generated (David DeVorkin), 2020, NASM.2020.0033

Processing Information

Arranged, described, and encoded by Jessamyn Lloyd and Melissa Keiser, 2020.

Preferred Citation

Vera Rubin Digital Images, NASM.2020.0033, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access

Conditions Governing Use

Material is subject to Smithsonian Terms of Use. Should you wish to use NASM material in any medium, please submit an Application for Permission to Reproduce NASM Material, available at [Permissions Requests](#) .

Biographical / Historical

Vera Florence Cooper Rubin (1928-2016) was an American astronomer whose work provided clear, observational evidence of the existence of dark matter. Rubin graduated with a degree in astronomy from Vassar College in 1948, completed a master's degree from Cornell University in 1951, and a Ph.D. from Georgetown University in 1954. In the 1960s, Rubin began what would become a life-long quest to understand the motions of stars within galaxies and the motions of galaxies themselves. Expecting to discover that stars farther from the center of a galaxy moved more slowly than stars closer to the center, Rubin instead observed that the outermost stars all seemed to be orbiting faster than they should. The stars were being influenced by the gravity of a vast amount of undetected mass surrounding the galaxy that came to be known as dark matter. Rubin collaborated with gifted instrument-maker W. Kent Ford, Jr. using an image tube spectrograph he developed at the Carnegie Institution of Washington. When Rubin used this instrument in telescopes it allowed for much more sensitive observations of distant galaxies than had previously been possible. These observations yielded evidence for the existence of dark matter that stimulated general acknowledgement that it forms much of the mass in the universe. For her ground-breaking work, Vera Rubin became the second woman in history to receive the prestigious Gold Medal of England's Royal Astronomical Society. Rubin was also a member of the National Academy of Sciences and was awarded the National Medal of Science in 1993.

Scope and Contents

This collection consists of four born digital images of astronomer Vera Rubin, seated at her desk with papers relating to her discovery of dark matter, during an oral history interview conducted by Smithsonian National Air and Space Museum (NASM) curator David H. DeVorkin and NASM intern Ashley Yeager in Rubin's office at the Department of Terrestrial Magnetism, Carnegie Institution of Washington, Washington, D.C.; July 20, 2007. DeVorkin was the photographer and is not seen in the images; Yeager appears seated beside Rubin's desk in one image. Images were received as 300 ppi image files in RGB JPG format, each 2560 x 1920 pixels in size.

Arrangement

Collection is in original order.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Astronomy
Women scientists

Types of Materials:

Digital images

Names:

Rubin, Vera