# 116TH CONGRESS 1ST SESSION H.R. 3196

To designate the Large Synoptic Survey Telescope as the "Vera Rubin Survey Telescope".

#### IN THE HOUSE OF REPRESENTATIVES

JUNE 11, 2019

# A BILL

To designate the Large Synoptic Survey Telescope as the 'Vera Rubin Survey Telescope''.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

# **3** SECTION 1. SHORT TITLE.

- 4 This Act may be cited as the "Vera Rubin Survey
- 5 Telescope Designation Act".

### 6 SEC. 2. FINDINGS.

- 7 Congress finds the following:
- 8 (1) Dr. Vera Rubin was born July 23, 1928, to
- 9 Philip and Rose Applebaum Cooper.

Ms. JOHNSON of Texas (for herself and Miss GONZÁLEZ-COLÓN of Puerto Rico) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

1	(2) Dr. Rubin pursued her graduate studies at
2	Cornell University and Georgetown University, earn-
3	ing her Ph.D. in Physics in 1954.
4	(3) Dr. Rubin's Ph.D. thesis on galaxy motions
5	provided supporting evidence that galaxies are not
6	uniformly distributed, but exist in clusters.
7	(4) Dr. Rubin continued to study the motions
8	of galaxies, first as research associate and assistant
9	professor at Georgetown University, and then as a
10	member of the staff at the Carnegie Institution of
11	Washington Department of Terrestrial Magnetism.
12	(5) Dr. Rubin faced barriers throughout her ca-
13	reer because of her gender.
14	(6) For instance, one of the world's leading as-
15	tronomy facilities at the time, the Palomar Observ-
16	atory, did not permit women. Dr. Rubin persisted
17	and was finally allowed to observe at Palomar in
18	1965, the first woman officially allowed to do so.
19	(7) In 1970, Dr. Rubin published measure-
20	ments of the Andromeda galaxy showing stars and
21	gas orbiting the galaxy's center too fast to be ex-
22	plained by the amount of mass associated with the
23	light output of the stars.
24	(8) In the years that followed, Dr. Rubin and
25	her collaborators used their observations, in conjunc-

1 tion with the work by earlier astronomers on the ro-2 tation of stars in spiral galaxies, to provide some of 3 the best evidence for the existence of dark matter. 4 (9) This work contributed to a major shift in 5 the conventional view of the universe, from one 6 dominated by ordinary matter such as what pro-7 duces the light of stars, to one dominated by dark 8 matter. 9 (10) Dr. Rubin was elected to the National 10 Academy of Sciences in 1981, the second woman as-11 tronomer to be so honored. 12 (11) Dr. Rubin was awarded the President's 13 National Medal of Science in 1993 "for her pio-14 neering research programs in observational cos-15 mology which demonstrated that much of the matter 16 in the universe is dark, and for significant contribu-17 tions to the realization that the universe is more 18 complex and more mysterious than had been imag-19 ined". 20 (12) Dr. Rubin was an outspoken advocate for 21 the equal treatment and representation of women in 22 science, and she served as a mentor, supporter, and

role model to many women astronomers throughout

24 her life.

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(13) The Large Synoptic Survey Telescope,
 funded jointly by the National Science Foundation
 and the Department of Energy, will honor the legacy
 of Dr. Rubin and her colleagues to probe the nature
 of dark matter by mapping and cataloging billions of
 galaxies through space and time.

# 7 SEC. 3. DESIGNATION.

8 The Large Synoptic Survey Telescope shall be known9 and designated as the "Vera Rubin Survey Telescope".

### 10 SEC. 4. REFERENCES.

Any reference in a law, map, regulation, document,
paper, or other record of the United States to the facility
described in section 3 shall be deemed to be a reference
to the "Vera Rubin Survey Telescope".

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