

# Silent Sky

# by Lauren Gunderson

Theatre Pro Rata February 22-March 8 2020

Whitney and Elizabeth Macmillan Planetarium Bell Museum University of Minnesota

### About the play

In the early twentieth century, Henrietta Leavitt and a group of women "computers" pursued astronomical research at the Harvard Observatory under the supervision of a male scientist. Their work proved to be crucial to the development of the field. Henrietta herself had to balance her dedication to her work with the demands of her family and the possibility of personal relationships. The achievements and difficulties of a woman scientist in a challenging historical period combine in this thought-provoking and engaging play by Lauren Gunderson. Come listen to the music of the spheres!

# About the playwright

Lauren Gunderson is a playwright, screenwriter, and short story writer from Atlanta, Georgia; in 2020 she is one of the most produced playwrights in the U.S. Theatre Pro Rata produced her play *Emilie: La Marquise du Châtelet Defends Her Life Tonight* in summer 2013. She received her BA in English/Creative Writing from Emory University and her MFA in Dramatic Writing from New York University—Tisch School of the Arts. She has written over twenty plays, a number of which involve issues related to science. Her work has received national praise and awards including the Berrilla Kerr Award for American Theatre, Global Age Project, Young Playwright's Award, Eric Bentley New Play Award and Essential Theatre Prize. Visit her website at http://laurengunderson.com/. Follow her on Twitter: @LalaTellsAStory.

Silent Sky resources

Henrietta Swan Leavitt https://en.wikipedia.org/wiki/Henrietta\_Swan\_Leavitt

Williamina Fleming https://en.wikipedia.org/wiki/Williamina\_Fleming

Annie Jump Cannon https://en.wikipedia.org/wiki/Annie\_Jump\_Cannon

Harvard's women computers (and NASA's) <u>https://www.atlasobscura.com/articles/how-female-computers-mapped-the-universe-and-brought-america-to-the-moon</u>

Cepheid Variables https://en.wikipedia.org/wiki/Cepheid\_variable

Harvard's astronomical photo plate collection <a href="https://platestacks.cfa.harvard.edu/">https://platestacks.cfa.harvard.edu/</a>

NASA photo library https://images.nasa.gov/

Women's suffrage 2020 is the 100<sup>th</sup> anniversary of the passage of the 19<sup>th</sup> amendment, which gave American women the right to vote. https://en.wikipedia.org/wiki/Women%27s\_suffrage\_in\_the\_United\_States

Lia Halloran's art based on women in astronomy http://www.liahalloran.com/your-body-is-a-space-that-sees

### Books

The Glass Universe: How the Ladies of the Harvard Observatory Took the Measure of the Stars by Dava Sobel (2017)

Miss Leavitt's Stars: The Untold Story of the Woman Who Discovered How to Measure the Universe by George Johnson (2005)

Women Astronomers: Reaching for the Stars—Women Have Always Studied the Night Sky by Mabel Armstrong (2008)

Look Up! Henrietta Leavitt, Pioneering Woman Astronomer by Robert Burleigh (2013). This is a book recommended for children 4-8.

# Other resources

"The First Computers Were Human" by Clive Thompson. Smithsonian, June 2019. <u>https://www.smithsonianmag.com/science-nature/history-human-computers-180972202/</u>

Interview with Dava Sobel about her book from *The Atlantic*. <u>https://www.theatlantic.com/science/archive/2016/12/the-women-computers-who-measured-the-stars/509231/</u>

Harvard Gazette article from December 2018. https://www.radcliffe.harvard.edu/news/in-news/circuit-boards-femalecomputers-set-standard

The wonder of the night sky by Bob Timmons. *Minneapolis Star Tribune*, December 5, 2019. <u>http://www.startribune.com/night-skies-are-a-wondrous-</u> <u>frontier-that-are-missed-by-most-author-says/565838822/</u>

Updates on your cosmos and the world: <a href="https://earthsky.org/">https://earthsky.org/</a>

### Join the Zooniverse Star Notes project!

Here's their announcement: We are happy to announce a new Zooniverse project: <u>Star Notes</u>

The Harvard Computers were a group of women who worked at the Harvard Observatory from the late 1800s to early 1900s. This group included Annie Jump Cannon, Williamina Fleming, Henrietta Swan Leavitt, and many others. Our goal is to ensure that these notebooks, created by a remarkable group of people, are as accessible and useful as possible.

The goal of <u>Star Notes</u> is to link these notebooks back to their original source material: 500,000 glass plate photographs representing the first ever picture of the visible universe. Each glass plate is identified with a unique plate number. We need you to find and transcribe these handwritten plate numbers in the pages of the notebooks!

This project is part of <u>Project PHaEDRA</u> at the John G. Wolbach Library at the Harvard-Smithsonian Center for Astrophysics. The goal of Project PHaEDRA is to catalog, digitize, and transcribe over 2500 logbooks and notebooks created by the Harvard Computers and other early astronomers.

Get involved today: https://www.zooniverse.org/projects/projectphaedra/star-notes