## **ANNIE JUMP CANNON 1863-1941**



Annie Jump Cannon's mother inspired her love for the stars: she was the first person to teach her the constellations, using an old astronomy textbook to identify stars seen from their attic. She encouraged Annie to follow her own interests, suggesting that she pursue studies in mathematics, chemistry, and biology.

In 1880, Cannon was sent to Wellesley College in Massachusetts, one of the top academic schools for women. She studied physics and astronomy under Sarah Frances Whiting, one of the few women physicists in the US at the time. Cannon graduated Wellesley as valedictorian with a BS in Physics, 1884.

In 1894, Whiting hired her as a junior physics teacher at the college, allowing Cannon to take

graduate courses at the college in physics and astronomy, and inspired Cannon to learn about spectroscopy. Cannon enrolled at Radcliffe College giving her access to the Harvard College Observatory.

In 1896, Cannon became a member of the Harvard Computers, a group of women hired by Harvard Observatory director Edward C. Pickering to complete the Henry Draper Catalogue, with the goal of mapping and defining every star in the sky. Pickering said "Miss Cannon is the only person in the world—man or woman—who can classify stars so quickly." Cannon manually classified more stars in a lifetime than anyone else, a total of around 350,000 stars. She discovered 300 variable stars, five nova, and one spectroscopic binary, creating a bibliography that included about 200,000 references.

Cannon is best known for devising the star classification system *that is still used today*. It combined and simplified elements of the systems created by two of her fellow computers, Williamina Fleming and Antonia Maury. Cannon's scheme designated all main sequence stars O, B, A, F, G, K, and M. Astronomers later realized that her order perfectly ranks stars from hottest to coldest. All O stars, Cannon's first designation, are blazing hot stars while M stars, the final designation, are the coolest.

During her career, Cannon helped women gain acceptance and respect within the scientific community. Her calm and hardworking attitude and demeanor helped her gain respect throughout her lifetime and paved the path for future women astronomers.

Included among her many honors and awards, Cannon was first woman recipient of an honorary doctorate from Oxford University, first woman elected as officer of the American Astronomical Society; the lunar crater Cannon is named after her.

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

https://www.britannica.com/biography/Annie-Jump-Cannon

https://massivesci.com/articles/annie-jump-cannon-stars-space-scientist-women-in-science/