

Early astronomer from Greece. Aglaonice was incredibly skilled in predicting when and where a lunar eclipse would occur. Her ability is probably a result of her studying the Metonic cycle, a period of around 19 years, after which the lunar phases fall within the same time of the year. Many thought she was a sorceress as she used her astronomical knowledge to appear as if she was making the Moon "disappear" from the sky.



2nd or 1st century BC



Greek Neoplatonist philosopher, astronomer, and mathematician. Hypatia was recognised as one of the greatest thinkers, mathematicians and astronomers of her time. Her father was head of a prominent school and also a known astronomer and mathematician. Hypatia's contributions to these fields build on the works of Apollonius and Diophantus, including revising astronomical tables. She was a famed teacher and lecturer, and large audiences came to hear her speak. Hypatia suffered a violent death, being brutally murdered.



c. 355 - 415



Queen Seondeok of Silla was a Korean queen who reigned as the 27th ruler of Silla, one of the three Kingdoms of Korea. Her policies and investments brought about a time of great development not only in astronomy but in other scientific fields and culture. During her reign, Queen Seondeok built the Cheomseongdae Observatory. Still standing today, the 9 metres high structure is the oldest astronomical observatory in Asia.



c. 595 - 647



Lived in Aleppo, now northern Syria. al-Asturlabi was an astronomer and maker of astrolabes, an ancient astronomical instrument that was used to predict the motions of objects in the sky, like the Sun, Moon, and stars. The daughter of another astrolabe maker, Mariam mastered the design and making of astrolabes and produced instruments which were capable of making precise calculations and accurate predictions. She was employed by the first Emir of Aleppo, Syria, Saif al-Dawla, to construct these instruments.



10th century



Danish scientist and writer who worked in astronomy, horticulture, chemistry, and medicine. Born into an aristocratic family, Sophia Brahe is the younger sister of the famous astronomer Tycho Brahe. She often helped her brother with astronomical observations, and her work contributed to the development of Tycho's theory of planetary orbits. She also made her own observations of comets and eclipses.



1559 - 1643



Born in Germany, Caroline Herschel is considered the first professional female astronomer. She discovered several comets, an open star cluster and 14 nebulae. She worked closely with her brother, Sir William Herschel, including assisting him in building astronomical instruments, cataloguing stars, and executing calculations. As her brother's assistant, she received a salary from King George III of England. The Royal Astronomical Society awarded her its gold medal.





Wang Zhenyi was a Chinese astronomer, mathematician, poet, and acclaimed scholar. She authored articles on equinoxes and the relationship between lunar and solar eclipses. She researched the movement of the Sun, Moon and Earth, and developed innovative experiments to prove her theories. Wang Zhenyi was also an accomplished poet, publishing 13 volumes of poetry, prefaces and postscripts.





Caterina Scarpellini was an Italian astronomer and meteorologist. She worked as her uncle's assistant at the Astronomical Observatory of Sapienza - University of Rome. She was the founder, together with her husband, and the editor of Corrispondenza Scientifica, a bulletin that published scientific discoveries from her observatory and other research institutions. She founded a meteorological station in Rome.





Henrietta Swan Leavitt was an American astronomer who worked at the Harvard College Observatory as a "computer", measuring and cataloguing the brightness of stars. Her wealthy background allowed her to join the team at Harvard first as a volunteer. She discovered the relation between luminosity and the period of Cepheid Variables - stars that become brighter and dimmer within a given time-frame. Her findings provided astronomers with the first "standard candle" - a way to measure galactic distances using know measurements of stars' luminosity and distance. Building on the work of Henrietta Swan Leavitt, Edwin Hubble demonstrated the existence of other galaxies outside the Milky Way.



1868 - 1921



Born in England in an upper-class family, Cecilia Payne-Gaposchkin was an American-based astronomer. Her ground-breaking PhD thesis was published under the title "Stellar Atmospheres - A Contribution to the Observational study of High Temperature in the Reversing Layers of Stars". In it, Cecilia Payne-Gaposchkin not only demonstrated that stars are composed mainly of hydrogen and helium, an idea that challenged the scientific consensus of the time, but she also showed that stars could be classified according to their temperatures. Additionally, her work on the nature of variable stars laid the foundation for the current understanding of these astronomical objects.





Paris Pişmiş was an Armenian-Mexican astronomer with many firsts, including being the first woman to obtain a PhD from the Science Faculty of Istanbul University and the first professional astronomer in Mexico - the very first. She was one of the first astronomers to study young stellar clusters using photometric photometry. Her work in the field of galactic structure led he to catalogue over 20 Open Clusters and 2 Globular Clusters. She published over 100 papers.





A pioneer in the field of Radio Astronomy, Ruby Violet Payne-Scott was born in Australia and was the first female radio astronomer in her country. Her research focused on solar noise, especially in relation to sunspots - areas on the Sun's surface that appear darker. Her research was central to the discovery of new types of sunbursts - energy emissions from the solar corona -, and laid the foundations for the mathematical research in radio astronomy. Together with Joe Pawsey, and Lindsay McCready, she demonstrated the connection between sunspots and increased radio emissions from the Sun.



1912-1981



The work of this ground-breaking American astronomer confirmed the existence of dark matter. Vera Rubin's research focused on the dynamics of galaxies and provided some of the first evidence for galaxy mergers. While working with Kent Ford, an astronomer who had developed an advanced spectrometer (an instrument that breaks light out into its constituting parts), Vera Rubin discovered that stars in the centre and in the periphery of the Andromeda galaxy rotate at the same speed. The fact suggested the existence of matter "holding" the rapid moving stars at the outer regions in orbit. Her observations confided the existence of unseen mass in the universe - or dark matter. Her legacy was described by The New York Times as "ushering in a Copernican-scale change" in cosmological theory.





May Arif Kaftan was a pioneering Iraqi astronomer. Educated in England and the USA, she earned her PhD at Harvard and was among the first radio astronomers in the USA. At the National Radio Astronomy Observatory, she was known for her strong character and humor. She later taught at SUNY Albany and initiated the establishment of an Iraqi Astronomical Observatory. Despite challenges, she played a key role in its development until internal politics and the Iran-Iraq War led to her resignation and the project's eventual destruction. She continued her academic pursuits in the USA and represented Iraq in international space organizations. Kaftan-Kassim passed away in Alexandria, VA, leaving a legacy of dedication to astronomy and her country.





Born in Northern Ireland, Jocelyn Bell Burnell discovered the existence of pulsars - astronomical objects that contain more mass than the sun and emanate light but are not stars. She discovered the existence of Pulsars while working on her PhD studies at Cambridge University. Despite her discovery, Jocelyn Bell Burnell's supervisor received much of the credit for her work and was even awarded a Nobel Prize based on Burnell's discovery. She had a prominent career as a researcher and lecturer, she was the president of the Royal Astronomical Society and of the Institute of Physics.



1943 -



American medical doctor and astronaut. Prior to her career as an astronaut, Mae Jemison was also in the Peace Corps as a medical officer in Sierra Leone and Liberia. She is known for being the first black woman in Space. She was the mission specialist aboard the Endeavour and spend nearly 8 days orbiting the Earth. Following her career at NASA, she founded various companies and the Dorothy Jemison Foundation for Excellence, a non-profit working on STEM education and sustainability. She is a member of various scientific organisations, such as the American Medical Association, the American Chemical Society, the Association of Space Explorers and the American Association for the Advancement of Science.



1956 -



Born in Puerto Rico, Díaz-Merced lost her sight in her early twenties due to complications with degenerative diabetic retinopathy. Not letting this interfere with her career in astronomy, she found new ways to study stellar radiation without relying on her vision. She realised that she could use her ears to detect patterns in stellar radio data that could potentially be obscured in visual and graphical representation. Wanda is best known for using sonification to turn large astronomical datasets into sound. Wanda Díaz-Merced was instrumental in advising on and testing sonification for use in the astronomical profession.



1982 -



She was an accomplished Silesian astronomer and the most notable female astronomer of the early modern era. She received a thorough education and knew several languages. She authored a book Urania propitia, in which she provided new tables and a simpler working solution to Kepler's second law for determining the position of a planet on its elliptical path. Maria Cunitz maintained several years of correspondence with Johannes Hevelius and with the French astronomer Ismail Bouillaud.





Elisabeth Koopmann-Hevelius was an astronomer from Gdansk, Poland, the daughter of a wealthy merchant from the Netherlands. She was educated, knew several languages, and had broad scientific interests. At the age of 16, she married 52-year-old Johannes Hevelius. Together with her husband, she conducted astronomical observations and research, and helped design the observatory in Gdansk. She corresponded with many European scientists. After Hevelius' death, she completed and published their work, which was a beautiful atlas of constellations and a catalog of 1,564 stars and their positions.





Polish neurobiologist and astrobiologist. Founder of Polish laboratories for simulating analog space missions. Social activist. She was nominated for the prestigious UN "Rise and Raise Other Award" awarded by United Nations Women. She is the chairwoman of the advisory board of UNIVERSEH - European Space University and a member of the scientific council of the AGH Space Technology Center, the Astronomia Nova Association, the World Research Center, the Space Habitats expert group of the international astronautical organization IAF and the private space agency Valles Marineris.



1981 -