Joycelyn Bell: (1943 -) Astrophysicist, Scholar, Trailblazer



Irish-born British Astrophysicist Jocelyn Bell is best known for co-discovering the first four pulsars, pulsating radio sources composed of compact neutron stars that emit electromagnetic radiation from their magnetic poles. She was a graduate student under the supervision of astrophysicist Anthony Hewish when she made the discovery. Hewish, along with Martin Ryle received the Nobel prize for their pioneering work in radio astrophysics. Bell, however, did not receive the honor. She ultimately put the Nobel Prize controversy to rest:

"Demarcation disputes between supervisor and student are always difficult, probably impossible to resolve... it is the supervisor who has the final responsibility for the success or failure of the project." Joycelyn Bell

Personal Life:

Bell was born in Northern Ireland in 1943. She attended Lurgan College and The Mount School in York. Her father was an architect who designed planetariums. She often accompanied him, developing an interest in astronomy. Although she faced many hurdles in school to pursue a career in the sciences, her greatest influence was Mr. Tillot, her school physics teacher, who saw her potential and encouraged young Joycelyn to pursue her passions.

She married Martin Burnell in 1968, divorced in 1993. They had one son, David Burnell.

Career:

Joycelyn graduated from the University of Glasgow with a B.S in Physics in 1965 and obtained a Ph.D. in physics from the University of Cambridge in 1969.

She had a very successful career teaching and conducting research in many renowned observatories and universities, including University College London, Royal Observatory, and Open University among others.

Honors and Awards:

Throughout her life she was the recipient of many other awards, including the 2018 Special Breakthrough Prize in Fundamental Physics, worth three million dollars, for the discovery of radio pulsars. She donated the entire money to fund women, under-represented ethnic minority, and refugee students to become physics researchers.

Reference:

- https://en.wikipedia.org/wiki/Jocelyn Bell Burnell
- https://www.britannica.com/biography/Jocelyn-Bell-Burnell