

Gold Medal 2021 - Professor Dame Jocelyn Bell Burnell

Full citation

Professor Dame Jocelyn Bell Burnell has made an exceptional contribution to astronomy through her research, teaching, academic leadership and public engagement.

She trained originally as a radio astronomer during her PhD at the University of Cambridge, when she co-discovered the first pulsar, kicking off a whole new field of astronomy. She subsequently worked in gamma ray astronomy at the University of Southampton, in X-ray astronomy at the Mullard Space Science Laboratory and in infra-red and millimetre wave astronomy at the Royal Observatory Edinburgh.

Prof. Bell Burnell's diverse achievements include serving as a project manager during the construction of the James Clerk Maxwell Telescope. As Head of Department at the Open University she helped to establish, shape and define the highly successful Astronomy Research Group. She has served terms as President of the Royal Astronomical Society, the Institute of Physics and the Royal Society of Edinburgh, and is an internationally successful science communicator.

Prof. Bell Burnell has been an exemplary role model and advocate for underrepresented groups throughout her career. She is one of the founders of the Athena SWAN scheme to address gender inequality in Higher Education and research. This scheme has had a transformative impact, with over 800 institutions and departments receiving Athena SWAN awards since 2015. She established a fund from her Breakthrough Prize of 2018 to support graduates from under-represented minorities who wish to study for a PhD in physics, as well as supporting students from disadvantaged backgrounds.

Through her selfless dedication and service to the astronomy and wider scientific community, Prof. Bell Burnell continues to be an inspirational example of responsible, fair and effective leadership and an exceptional force for good.

For these reasons Professor Dame Jocelyn Bell Burnell is awarded the Gold Medal.

Short citation

Alongside her academic research, Professor Dame Jocelyn Bell Burnell has made outstanding contributions to astronomy through her national and international leadership roles, notably at the James Clerk Maxwell Telescope and the Open University, as well as serving as President of the Royal Astronomical Society, the Institute of Physics and the Royal Society of Edinburgh.

Prof. Bell Burnell is an inspirational example of responsible, fair and effective leadership and a world-leading science communicator. She is an unwavering advocate for widening participation, creating transformative educational and

research opportunities to under-represented minorities and those from disadvantaged backgrounds.

For these reasons Professor Dame Jocelyn Bell Burnell is awarded the Gold Medal.