

Citation for the 2018 RAS 'A' Jackson-Gwilt: Professor Wayne Holland

The 2018 Jackson-Gwilt Medal in Astronomy is awarded to Professor Wayne Holland.

Prof Holland has made great contributions to the evolution of submillimetre astronomy from the era of single-pixel instruments to large-format imagers, and in particular in his leadership of SCUBA-2, the world's most powerful submillimetre camera. He pioneered the development of the bolometric detectors that were used in the revolutionary SCUBA instrument for the JCMT, and became the SCUBA Instrument Scientist.

Prof Holland led the development of the ambitious next generation transition-edge superconducting detector camera SCUBA-2 as Project Scientist. Developing, building and operating it involved many challenges in optics, cryogenics, detector technology and in instrument operation and data processing. SCUBA-2, like SCUBA before it, defined the state of the art worldwide, proving revolutionary in cosmology, nearby galaxies, star formation in the Milky Way, protoplanetary and debris discs, and evolved stars.

For these reasons, Professor Holland is awarded the Jackson-Gwilt Medal.