

Gravitational wave observations – a new astronomy

Professor Sheila Rowan



7.30 p.m 16th November, 2016
Main Lecture Theatre, (3.25)
John Anderson Building
University of Strathclyde

www.royalphil.org

Biography

Prof Sheila Rowan is Director of the Institute for Gravitational Research at the University of Glasgow and Chief Scientific Adviser to the Scottish Government. Her research, and that of her institute is directed at studying the Universe using gravitational waves - changes in the curvature of spacetime produced by astrophysical objects and events.

<http://www.gla.ac.uk/schools/physics/staff/sheilarowan/>

Abstract.

In September 2015 the twin 'Advanced LIGO' observatories allowed the first direct detection of gravitational waves from astrophysical sources. The waves detected originated from the collision and merger of two black holes 1.3 billion light years from earth. This detection marked the start of new field of gravitational astrophysics, in the 100th anniversary year of Einstein's General Theory of Relativity. This talk will discuss the first and second detections, the status of observations since then, plans for the global network of Advanced gravitational wave detectors and what the future of the field might look like.