

## **Citation for the 2018 RAS 'A' Gerald Whitrow Lecture: Professor Martin Rees**

The 2018 Gerald Whitrow Lecture in Astronomy is awarded to Professor Martin Rees.

Professor Martin Rees is one of the most distinguished theoretical astrophysicists of his generation. He has made transformational contributions across a diverse range of subjects, from accretion discs around stellar black holes to quasars, radio galaxies, gamma-ray bursts and cosmology.

Professor Rees' ideas laid the foundations for the modern understanding of galaxy formation: with Ostriker, he derived the characteristic masses and sizes of galaxies and, with White, he explained the assembly of galaxies in hierarchical cosmologies. He carried out one of the first calculations of temperature anisotropies in the cosmic microwave background radiation, the Rees-Sciama effect. He is a pioneer of the current cosmological paradigm, the cold dark matter model, which he helped launch in a manifesto in 1984. Professor Rees has written over 450 research papers, has supervised a large number of PhD students and inspired many more.

Alongside his scientific work, Professor Rees has written and spoken extensively about the wider implications of science and cosmology for human civilization. He has written 10 popular books, including "Our Last Century", in which he weighs the probability that civilization, as we know it, will survive the 21st century. He has appeared in many radio and television programmes, and sits in the House of Lords where he is an effective advocate for science.

For these reasons, Professor Rees is awarded the Gerald Whitrow Lecture.