

**Title**

Einstein's Universe: General Relativity and the Big Bang

**Abstract**

In this lecture, an overview of the role of general relativity in modern cosmology will be presented, from the big bang model of the evolution of the universe to our understanding of black holes. Some recent discoveries concerning Einstein's own cosmology will also be discussed.

**Speaker**

Dr Cormac O'Raiheartaigh is a graduate of University College Dublin (BSc Hons) and Trinity College Dublin (Phd). He lectures in physics at Waterford Institute of Technology and is a fellow of the Royal Astronomical Society and a former fellow of the Science, Technology and Society program at Harvard University. A solid state physicist by training, his research has recently focused on the history and philosophy of 20<sup>th</sup> century physics, in particular the rise of the Standard Model of particle physics and the rise of the Big Bang model of the evolution of the universe. He is best known for original historical work concerning the cosmology of Albert Einstein, in particular the discovery that Einstein once explored a steady-state model of the universe many years before Fred Hoyle. .