

## Cosmology and the Constants of Nature 17 - 19 March 2014

Venue: Centre for Mathematical Sciences, University of Cambridge A three-day meeting aimed at both physicists and philosophers of science.

The constants of Nature are quantities, whose numerical value we know with the greatest experimental accuracy - but about the rationale for those values, we have the greatest ignorance. We might also ask if they are indeed constant in space and time, and investigate whether their values arise at random or are uniquely determined by some deep theory.

This mini-series of talks, part of the joint Oxford-Cambridge programme on the Philosophy of Cosmology, will introduce the physical constants that define the standard model of particle physics and cosmology together with the data that determine them, describe observational programmes that test the constancy of traditional 'constants', and discuss how self-consistent theories of varying constants can be formulated. The talks are aimed at philosophers of physics but should also be of interest to a wide range of cosmologists.

## Speakers include:

John Barrow, University of Cambridge John Ellis, King's College London Pedro Ferreira, University of Oxford Joao Magueijo, Imperial College London Thanu Padmanabhan, Inter-University Centre for Astronomy and Astrophysics, Pune Martin Rees, University of Cambridge John Webb, University of New South Wales, Sydney

Registration is free and includes lunch and morning coffee.

Organisers: Professor John D Barrow FRS, Dr Jeremy Butterfield FBA, Dr David Sloan, University of Cambridge

## For more information and to register see damtp.cam.ac.uk/events/constants2014/