We are delighted to announce that the first FITP event of 2015 will be a talk entitled *The Universe Unveiled* given by Prof Carlo Contaldi. The event is free and open to all but please register by visiting the Eventbrite website via [http://tinyurl.com/fitptalk2015](http://tinyurl.com/fitptalk2015).

**Date:** 29th April 2015  
**Venue:** Lecture Theatre 1, Blackett Laboratory, Physics Department, ICL  
**Time:** 7-8pm followed by a reception in the level 8 Common room  
**Speaker:** Professor Carlo Contaldi

---

**The Universe Unveiled**

The past 25 years have seen our understanding of the Universe we live in being revolutionised by a series of stunning observational campaigns and theoretical advances. We now know the composition, age, geometry and evolutionary history of the Universe to an astonishing degree of precision. A surprising aspect of this journey of discovery is that it has revealed some profound conundrums that challenge the most basic tenets of fundamental physics. We still do not understand the nature of 95% of the matter and energy that seems to fill the Universe, we still do not know why or how the Universe came into being, and we have yet to build a consistent "theory of everything" that can describe the evolution of the Universe during the first few instances after the Big Bang. In this lecture I will review what we know about the Universe today and discuss the exciting experimental and theoretical advances happening in cosmology, including the controversy surrounding last year's BICEP2 "discovery".

**Biography of the speaker:**

Professor Contaldi gained his PhD in theoretical physics in 2000 at Imperial College working on theories describing the formation of structures in the universe. After a stint as a postdoctoral fellow and senior research fellow at the Canadian Institute of Theoretical Astrophysics in Toronto he returned to Imperial as a lecturer in 2005.

In 2013 he was appointed Professor of Theoretical Physics. Carlo is a theoretical cosmologist and his research interests centre around theories describing the early universe and how data collected by astronomers can be used to test the nature of gravity and matter.