



## Collegio Universitario "Luciano Fonda"

## Università degli Studi di Trieste

## Malcolm Longair

University of Cambridge

Time: May 25<sup>th</sup>, 6 PM Place: Sala conferenze dell'ex-Ospedale Militare - Trieste

## Einstein, Black Holes and the Discovery of Gravitational Waves



**Credits David Pescovitz / Boing Boing** 

The discovery of gravitational waves from coalescing black holes is one of the greatest physics discoveries in and astrophysics. Predicted exactly one hundred years before their discovery in 2016, the discovery of the signature of the inspiral and final coalescence of two black holes with masses about thirty times that of the Sun is wholly convincing. The discovery opens up new frontiers in physics and

astrophysics for the understanding of really strong gravitational fields. In the lecture, the background to the discovery will be described at a non-technical level. The topics include the mounting evidence for supermassive black holes in active galaxies, the massive black hole in the Galactic Centre, as well as the physics of gravitational waves. The lecture will be profusely illustrated by simulations and videos.

Everyone interested in the topic is welcome to attend, please register by email: collegio.fonda@amm.units.it