21 MARÇO
2017 | 16h30

Instituto Superior Técnico
Campus Alameda

Anfiteatro Abreu Faro
Complexo Interdisciplinar

The Gravitational Universe: A New View of the Cosmos

Shane L. Larson

**Research Associate Professor of Physics at Northwestern University
Member of CIERA (Center for Interdisciplinary Exploration and Research in Astrophysics) and Astronomer at the Adler Planetarium**

Virtually everything we know about the Universe has been discovered from the study of photons - light in all its myriad forms from radio waves, to visible light, to x-rays and beyond. At the dawn of the 21st century, advanced technology is providing access to the Cosmos through detection of ripples in the fabric of spacetime itself.

These ripples in spacetime, called gravitational waves, carry information not in the form of light or particles, but in the form of gravity itself. In the early morning hours of 14 September 2015, a long-awaited gravitational wave signal came booming out of the sky, trigging the twin LIGO detectors in Hanford, Washington and Livingston, Louisiana. The signal was the signature of two black holes merging to form a new, larger black hole. The event happened 1.3 billion lightyears away, and the information has been travelling toward Earth since before multi-cellular life existed on our planet.

In this chat, we'll talk about this momentous discovery - how we found out about it, what LIGO saw, what it taught us about the Universe, and what the future holds in store for us now.

Entrada Livre

email coordenação-bist@tecnico.ulisboa.pt
site http://bist.tecnico.ulisboa.pt/

TÉCNICO LISBOA

AMERICAN CORNERS PORTUGAL