# 12th Iberian Gravitational Waves Meeting



Monday, 6 June 2022 - Wednesday, 8 June 2022 University of Minho, Campus Gualtar, Pedagogical Complex II (CP2), Room B1

## **Scientific Programme**

#### **General Topics of the Scientific Programme**

The program of the event, starts with an overview of the current on-going Gravitational Waves (GW) experiments and future prospects, followed by sessions dedicated to GW Theory, Fundamental Physics, Cosmology, Modelling, Analysis of Data and its interpretation and Machine Learning algoritms.

The program in every session, starts with talks from invited speakers, followed by shorter contributed talks from registered participants.

#### **GW Theory and Fundamental Physics**

In this session the current theoretical status of GW theory and related fundamental physics, is discussed.

#### **Cosmological Sources of GW**

In this session an overview of the different cosmological sources of GW are discussed, together with their main properties (Pulsars, Neutron Stars, Black Holes, Core Collapse Supernovas, Boson Stars, etc.)

### **Modelling and Machine Learning Algorithms**

The modelling used in the detection of GW is discussed in this session from the different approximants used down to the experimental detection of GW using Machine Learning methods are presented.