## ET: Scienza e Tecnologia in Italia



Contribution ID: 1 Type: not specified

## **GWFish: Simulation of gravitational-wave detector networks with Fisher-matrix PE**

Tuesday, 20 February 2024 13:40 (1h 20m)

This tutorial will show early career scientists and students the tools used in order to estimate the capabilities of Einstein Telescope in detecting and estimating the parameters of compact binary sources.

It will include an introductory section regarding how compact binary waveforms are parametrized, analyzed with matched filtering, and the Fisher matrix approach.

Then, a hands-on session with the software package GWFish will allow attendees to apply these concepts in practice.

The tutorial will assume basic familiarity with the python programming language.

The hands-on will be based on Google Colab (https://colab.research.google.com/) notebooks, therefore no local python installation will be needed, only a Google account.

Presenters: TISSINO, Jacopo; DUPLETSA, Ulyana