## 10th International Conference on New Frontiers in Physics (ICNFP 2021)



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# Future plans for GW detectors

Wednesday, 25 August 2021 12:00 (30 minutes)

In the coming years the present gravitational wave detectors LIGO, Virgo and KAGRA, will maximize their sensitivity with the aim to reach a detection rate greater than one gravitational event per day. This is foreseen during the fifth observation period O5, starting from 2025.

Moreover, the future generation of ground-based observatories (3G), planned after 2030, the Einstein Telescope (in Europe), the Cosmic Explorer (in the USA) and the Nemo (in Australia), will be able to extend the observation window for gravitational signals and intercept not only the cosmic events produced by the fusion of black holes and neutron stars, but also the gravitational signals generated in the early phases of the life of our Universe.

We will present which are the plans for the interferometers including the ideas foreseen for the post-O5 period till the start of the 3G interferometers data taking.

### Is this abstract from experiment?

Yes

#### Name of experiment and experimental site

Virgo

# Is the speaker for that presentation defined?

Yes

## Details

Paola Puppo, researcher, INFN - Roma, italy www.roma1.infn.it

#### Internet talk

Yes

Primary author: Dr PUPPO, Paola (INFN)

Presenter: Dr PUPPO, Paola (INFN)

**Session Classification:** Workshop on New physics paradigms after Higgs and gravitational wave discoveries