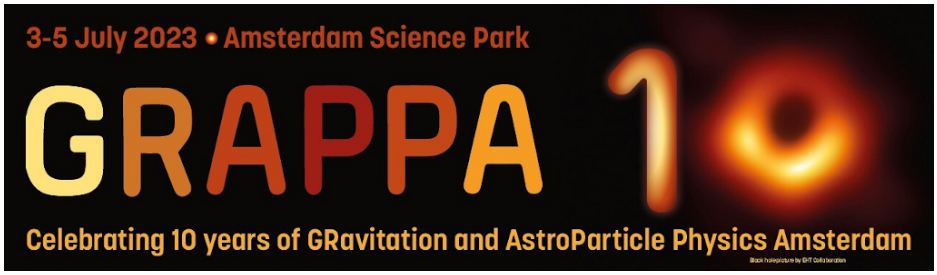

Contribution ID: **50** Type: **not specified**

Neutrinos in the Mediterranean Sea

Wednesday, 5 July 2023 11:00 (15 minutes)

Neutrino astronomy is a rapidly evolving discipline probed by large-volume neutrino detectors such as those being built by the KM3NeT collaboration in the Mediterranean Sea, instrumenting a cubic kilometre of sea-water. KM3NeT focuses on the detection of cosmic high-energy neutrino sources as well as measurements of the atmospheric neutrino oscillations to expand our understanding of fundamental physics.
The transparency of the seawater allows accurate reconstructions of events achieving <0.1 degree angular resolution for neutrinos with energies >100TeV with great potential to locate cosmic high-energy neutrino sources. The location of KM3NeT offers an excellent view of the Southern Hemisphere with the interesting galactic center region.
The construction of KM3NeT is ongoing with ˜10% of the detector already deployed in the sea. The talk presents the first results and prospects of KM3NeT.

Primary author: MULLER, Rasa

Presenter: MULLER, Rasa