



Contribution ID: 84

Type: Talk

## Latest results and outlook of the KM3NeT neutrino telescope

Wednesday, July 12, 2023 5:00 PM (20 minutes)

The KM3NeT research infrastructure includes two underwater Cherenkov telescopes in the Mediterranean Sea, ARCA (Astroparticle Research with Cosmics in the Abyss) and ORCA (Oscillation Research with Cosmics in the Abyss). The detectors are still under construction but currently taking data and the first physics results were already obtained. The detection technology is the same for both telescopes but the scientific goals are different thanks to the difference in the detector geometries. The ARCA telescope, located off-shore the Sicilian coast in Italy, focuses on studying the high-energy cosmic neutrinos in the TeV-PeV range. The ORCA location is off-shore Toulon in France and its main goal is to explore the atmospheric neutrino oscillations in the GeV energy range. An overview of the recent results achieved with the KM3NeT detectors in their partial configurations will be shown in this talk. Also, the sensitivity to the cosmic neutrino measurements and the oscillation studies with the completed ARCA and ORCA telescopes will be presented.

### Is this abstract from experiment?

Yes

### Name of experiment and experimental site

KM3NeT

### Is the speaker for that presentation defined?

Yes

### Details

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### Internet talk

Yes

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