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KM3NeT: status of construction and recent physics results

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KM3NeT is a multi-site detector devoted to the detection and study of cosmic neutrinos and their sources in the Universe, and to the measurement of the neutrino oscillation parameters. Two underwater detectors are under construction in the Mediterranean Sea, ARCA (Portopalo di Capo Passero, Italy) and ORCA (Toulon, France), optimized respectively for neutrinos in the energy range of 1 TeV-100 PeV and 10 GeV-10 TeV. The mass construction of the detectors has started, and a long-term plan for the completion is in place. Currently, 19 (7) Detection Unit are active in the ARCA (ORCA) site. In this talk I will report the main physics results obtained with ARCA and ORCA, in their partial configurations. The KM3NeT alert system will be discussed, in the context of a multi-messenger approach. Finally, an overview of the expected performances of the full detectors will be given.

Summary

Primary author: BIAGI, Simone (Istituto Nazionale di Fisica Nucleare)

Presenter: BIAGI, Simone (Istituto Nazionale di Fisica Nucleare)

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