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High energy neutrino astronomy with KM3NeT

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The KM3NeT Collaboration aims at the discovery and subsequent observation of high neutrino sources in the Universe (ARCA) and at the determination of the neutrino mass hierarchy (ORCA).

This talk is focused on ARCA. The deployment of the firsts Detection Units at 3500 m depth offshore CapoPassero (Italy) started and two strings are in operation and data taking. ARCA will made of two buildings blocks made of 115 Detection Units corresponding to an instrumented volume of about 1 km3 and will provide a very large coverage of the neutrino sky (87% for up going muon neutrinos). The superior angular resolution (0.1° at energy higher of 10 TeV) will be very important for source search. In this talk the detector technology, status and perspectives for detection of high energy neutrinos signals from different candidate sources are discussed.

Primary author: Dr SAPIENZA, Piera (INFN-LNS)

Presenter: Dr SAPIENZA, Piera (INFN-LNS)

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