

Latest news on ANTARES and KM3NeT Observatories

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The ANTARES detector, located 40 km off the French coast, is the largest deep-sea neutrino telescope in the Northern Hemisphere with an instrumented volume of more than 0.01 cubic kilometers. The KM3NeT telescope has been designed to be the next generation of deep-sea telescope with an instrumented volume several hundred times larger. Both of them consist of an array of optical modules detecting the Cherenkov light induced by charged leptons produced by neutrino interactions in and around the detector. The first optical detector of KM3NeT has been deployed very recently on the ANTARES instrumentation line and the first muons observed. The primary goal of such telescopes is to search for astrophysical neutrinos in the TeV-PeV range. This comprises generic searches for any diffuse cosmic neutrino flux as well as more specific searches for astrophysical sources such as active galactic nuclei or Galactic sources. The search program also includes multi-messenger analyses based on time and/or space coincidences with other cosmic probes.

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