

Neutrino astronomy with KM3NeT/ARCA

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The identification of cosmic objects emitting high energy neutrinos provides new insights about the Universe and its active cosmic ray sources. The existence of cosmic neutrinos has been proven by the IceCube Neutrino Observatory, but the big question of which sources these neutrinos originate from remains largely unanswered. The KM3NeT/ARCA neutrino detector is currently under construction at the bottom of the Mediterranean Sea. The main science objective is the detection of high-energy cosmic neutrinos and discovering their sources. This is achieved by instrumenting a cubic kilometre of seawater with photo-multiplier tubes that detect Cherenkov radiation from neutrino interaction products. This contribution will present the results of the neutrino point source search with KM3NeT/ARCA with data from 2021 and 2022 taken with an evolving detector geometry.

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