

KM3NeT/ARCA. Status and perspectives

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Summary

The main goal of KM3NeT/ARCA is the detection of high energy neutrinos of cosmic origin. The first phase of construction will be completed in 2017 and will consist of 31 strings (instrumented volume of about 0.1 km³). The performance of the first string, deployed on the Italian site in December 2015, will be presented. A second phase with 2 blocks of 115 strings is scheduled to be completed in 2020. For neutrino energies above 10⁵ GeV, the median angular resolution for track and cascade events will be of <0.1° and <2°, respectively. The second phase detector is expected to observe the signal reported by IceCube in less than a year. Indications for galactic sources could be observed at a 3-sigma level within 3 years.

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