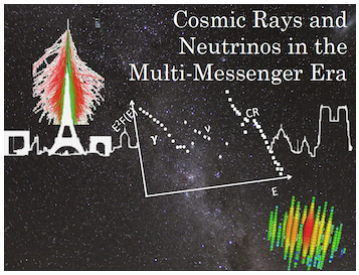

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Comparison of the measured atmospheric muon rate with Monte Carlo simulations for the first KM3NeT/ARCA and KM3NeT/ORCA Detection Units

The KM3NeT Collaboration has successfully deployed the first detection units of the next generation undersea neutrino telescope in the Mediterranean Sea in 2016 and 2017 at the two sites in Italy and in France. The sample of data collected between December 2016 and January 2020 has been used to measure the at mospheric muon rate at two different depths under the sea level: 3.5 km with ARCA and 2.5 km with ORCA. A tmospheric muons represent an abundant signal in a neutrino telescope and can be used to test the reliability of the Monte Carlo simulation chain. In this contribution data collected with the f irst detection units of K M3NeT are compared t o Monte Carlo simulations based on MUPAGE and CORSIKA codes. The main features of the simulation and reconstruction chain s are discussed and presented in the poster.

Related session

Searching for neutrinos

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