

# 11th International Workshop on Ring Imaging Cherenkov Detectors (RICH2022)



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## **KM3NeT: Status and Physics Results**

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KM3NeT is a research infrastructure housing two underwater Cherenkov detectors located in the Mediterranean Sea. It consists of two configurations which are currently under construction: ARCA with 230 detection units corresponding to 1 cubic kilometre of instrumented water volume and ORCA with 115 detection units corresponding to a volume of 7 Mton. The ARCA (Astroparticle Research with Cosmics in the Abyss) detector aims at studying neutrinos with energies in the TeV-PeV range coming from distant astrophysical sources, while the ORCA (Oscillation Research with Cosmics in the Abyss) detector is optimised for atmospheric neutrino oscillations studies at energies of a few GeV. Both detectors are using an innovative multi-PMT design of the optical modules which greatly improves their detection capability. In this talk we present the status of ARCA and ORCA focusing on the technological achievements of the experiment. We also discuss the results obtained using data taken with the first detection units, thus demonstrating the potential of each configuration.

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