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KM3NeT: Status and perspectives for neutrino astronomy from the MeV to the PeV

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KM3NeT is a multi-purpose neutrino observatory currently being deployed at the bottom of the Mediterranean Sea. It consists of two detectors: ORCA and ARCA (for Oscillation and Astroparticle Research with Cosmics in the Abyss). ARCA will instrument 1 Gton of seawater, with the primary goal of detecting cosmic neutrinos with energies between several tens of GeV and PeV. Due to its position in the Northern Hemisphere, ARCA will provide an optimal view of the Southern sky including the Galactic Center. ARCA currently has 8 detection units fully operating out of an eventual planned total of 230. ORCA is a smaller (~ few Mtons) and denser array, optimized for the detection of atmospheric neutrinos in the 1 - 100 GeV range. It can also study low-energy neutrino astronomy, such as MeV-scale core-collapse supernovae. ORCA currently has 10 detection units fully operating out of an eventual planned total of 115. I will report on the current status and recent discoveries of ARCA and ORCA as well as a timeline for future developments.

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