

First real-time results and CCSN alert triggering with the KM3NeT neutrino telescopes

Sunday, 16 June 2019 14:10 (15 minutes)

The KM3NeT collaboration has started to build the ARCA and ORCA neutrino detectors in the Mediterranean Sea. With the most recent data from the first instrumented lines deployed at each site, a detailed characterization of the detector and background has been achieved. The technique for Core-Collapse Supernova neutrino detection and its implementation as a real time trigger have been refined and tested to be robust and effective on both sites. The first real time results, including the combination of the online data streams of the two detectors, as well as the perspectives for the integration of KM3NeT in the SNEWS network will be discussed.

Primary authors: LINCETTO, Massimiliano (IN2P3/CPPM, Marseille); COLOMER MOLLA, Marta (APC/IFIC)

Presenter: LINCETTO, Massimiliano (IN2P3/CPPM, Marseille)

Session Classification: Contributed talks VI