3rd Astro-COLIBRI multi-messenger astrophysics workshop



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Real-time data processing with KM3NeT

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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), aiming at detecting cosmic neutrinos with energies between several tens of GeV and PeV. The extended field of view and high duty cycle of Cherenkovbased neutrino detectors are crucial to detect and inform pointing instruments about interesting neutrino candidates with low-latency. As such, KM3NeT is implementing a real-time analysis framework, in order to trigger fast multimessenger follow-up observations of interesting neutrino candidates as well as to respond to external alerts. In this contribution, I will report on the status of the KM3NeT real-time reconstruction, classification, and selection of neutrino induced events.

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Classification de Session: Contributed talks