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## A High-Energy Neutrino Detection with KM3NeT

*Thursday 25 September 2025 10:00 (20 minutes)*

The KM3NeT experiment, a next-generation neutrino observatory under construction in the depths of the Mediterranean Sea, aims to reveal the mysteries of the high-energy Universe by detecting neutrinos originating from astrophysical sources. In this talk, we present the observation of a high-energy neutrino event recorded by the KM3NeT detector, marking a significant milestone in its scientific mission. The event, characterised by a well-reconstructed muon track and a deposited energy in the PeV range, stands out due to its high signal-to-noise ratio and angular resolution, making it a strong candidate for an astrophysical origin. This discovery not only demonstrates KM3NeT's capability to contribute to neutrino astronomy but also opens new opportunities for identifying cosmic accelerators and understanding the mechanisms behind the production of ultra-high-energy particles.

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