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## Recent results from IceCube with GeV to PeV neutrinos

*Monday, 3 July 2023 17:10 (40 minutes)*

The IceCube experiment is a Cherenkov detector instrumented over a cubic kilometer, deep under the South Pole ice. Its primary array enables the detection of high-energy neutrino emissions from astrophysical sources, while a more densely instrumented subdetector, called DeepCore, located at the bottom of the main array, focuses on the detection of neutrinos down to GeV energies, where atmospheric neutrinos are dominant. This presentation highlights recent findings derived from oscillation measurements using atmospheric neutrinos within the energy range of 5-100 GeV and astrophysical studies employing high-energy datasets ( $>1$  TeV) of neutrinos. The talk aims to provide an overview of these results and future prospects.

**Presenter:** Dr YU, Shiqi

**Session Classification:** Overview talks 4: Astro-particle Physics & Cosmology