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Neutrino Event Properties and Reconstruction with the Radar Echo Telescope

Monday 21 July 2025 14:05 (15 minutes)

The Radar Echo Telescope (RET) collaboration aims to detect the cosmic neutrino flux at the highest energies through the radar echo method. Radar is a detection technique that allows for determining the position, speed and direction of a macroscopic object using radio waves. In-ice neutrino interactions leave a dense ionization trail that can be detected using radar. We will discuss the very rich phenomenology of the expected radar signal and its features, with an emphasis on reconstructing the neutrino properties such as arrival direction and energy.

Collaboration(s)

Radar Echo Telescope (RET)

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