

Hundred PeV neutrino by Tau air-shower at horizons: A new Astronomy beyond the corner?

Monday, 26 May 2025 12:15 (15 minutes)

Recent Km3, ARCA, neutrino detector discover of a hundreds PeV event on February 2023 , if confirmed, is very probably the UHE signature of UHECR secondary trace by GZK cut off. We show the expected rate of such neutrino induced air-shower by largest Telescope Array as CTAO while pointing downward the sea horizons. Such proposal had been considered long time ago by Magic telescopes. Our estimates assumed the exact inner Earth density profile, and the best analytical model for UHE neutrino interaction in Earth cord at Earth (water or rock) edges. We show the rate and the noise for such fundamental, but rare, events.

Primary author: FARGION, Daniele

Presenter: FARGION, Daniele

Session Classification: Rapid talks