

## The origin of ANITA-IV events from the synergies with IceCube

*Wednesday 31 May 2023 16:43 (5 minutes)*

Recently, the ANITA collaboration announced the detection of new, unsettling Ultra-High-Energy (UHE) events. Understanding their origin is pressing to ensure success of the incoming UHE neutrino program. In this talk, I will discuss the ANITA-IV events in contrast with the lack of observations in the IceCube Neutrino Observatory. I will introduce a general framework to study the compatibility between these two observatories both in the SM and Beyond Standard Model (BSM) scenarios. Finally, I will discuss the constraints on BSM and highlight the importance of simultaneous observations by high-energy optical neutrino telescopes and new, UHE detectors to uncover cosmogenic neutrinos or discover new physics.

### Would you be interested in presenting a poster? (this will not impact the decision on your talk)

yes

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