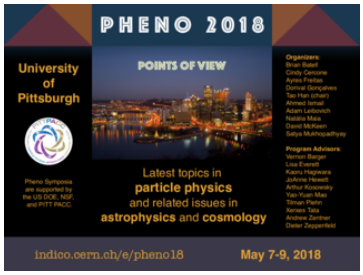

Contribution ID: **502** Type: **parallel talk**

Upgoing ANITA events as evidence of a heavy dark matter component in the Earth's interior

Monday 7 May 2018 17:30 (15 minutes)

We explain the two upgoing ultra-high energy shower events observed by ANITA as arising from the decay in the Earth's interior of the quasi-stable dark matter candidate in the CPT symmetric universe. The dark matter particle is a 480 PeV right-handed neutrino that decays into a Higgs boson and a light Majorana neutrino. The latter interacts in the Earth's crust to produce a τ lepton that in turn initiates an atmospheric upgoing shower. The fact that both events emerge at the same angle from the Antarctic ice-cap suggests an atypical dark matter density distribution in the Earth.

Summary

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