TeV Particle Astrophysics 2017 (TeVPA 2017)



Contribution ID: 312 Type: Oral

The Axion Resonant InterAction Detection Experiment (ARIADNE)

Thursday 10 August 2017 16:45 (15 minutes)

The Axion Resonant InterAction Detection Experiment (ARIADNE) will search for evidence of the QCD axion using nuclear magnetic resonance to search for a short-range spin-dependent interaction in the sub-millimeter range, which results from the Axion. ARIADNE features spin polarized 3He interacting with a rotating unpolarized tungsten mass as a probe for this interaction. We will outline the concept of the measurement and describe the status of the R&D progress to date.

Primary author: SHORTINO, Justin

Co-author: ARIADNE COLLABORATION

Presenter: SHORTINO, Justin

Session Classification: Dark matter

Track Classification: Dark matter (direct detection, indirect detection, theory, etc.)