



Contribution ID: 170

Type: **Talk**

Christian Boutan (Pacific Northwest National Laboratory): The Axion Dark Matter Experiment (ADMX): Overview & Recent Results

Thursday 22 February 2018 14:42 (20 minutes)

The Axion Dark Matter eXperiment (ADMX) is a DOE “Generation 2” direct-detection dark matter project searching for μeV axions. Exploiting the inverse primakoff effect where $a \rightarrow \gamma^* \gamma$, the experiment utilizes a tunable, high-Q cavity, submerged in a 8 Tesla magnetic field and looks for the resonant conversion of axions into microwave photons. Over the last decade the ADMX has undergone multiple upgrades and is now operating with unprecedented sensitivity, able to discover or rule out even the most pessimistically coupled DFSZ QCD axions. I will present an overview of the ADMX experiment and discuss preliminary results from our 2017 data run.

Presenter: BOUTAN, Christian (Pacific Northwest National Laboratory)

Session Classification: Session 9