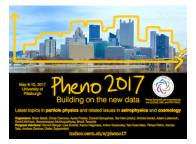
## Phenomenology 2017 Symposium



Contribution ID: 372

Type: parallel talk

## An Overview of Neutrino Floor Analysis and Application in the Search for Dark Matter and Coherent Scattering

Tuesday 9 May 2017 17:15 (15 minutes)

We discuss the early stages of the MINER coherent neutrino scattering reactor experiment at Texas A&M University. We examine the solar neutrino background both as motivation for the development of new ultralow threshold detectors to observe coherent scattering and for establishing a baseline event rate to assist in ongoing searches for dark matter. The latter allows for predictive statistical analysis in which potential deviations from this baseline due to non-standard interactions would help shed light on beyond standard model properties of neutrinos and could provide a more clearly defined direction for dark matter searches.

Summary

**Authors:** Mr JOHNSON, Derek (Sam Houston State University); Mr BREEDING, Matthew (Sam Houston State University); Dr WALKER, Joel (Sam Houston State University)

Presenter: Mr JOHNSON, Derek (Sam Houston State University)

Session Classification: DM IV