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## 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 ultra-low 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

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