

Abstract Submitted  
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**Performance and Capabilities of Double Neutrino Detectors with the Double Chooz Experiment** BEN RYBOLT, University of Tennessee, DOUBLE CHOOZ COLLABORATION — The Double Chooz experiment was designed to measure anti-neutrino disappearance from nearby nuclear reactors with identical near and far detectors. We will provide a precise independent measurement of the  $\theta_{13}$  mixing angle. The far detector has been taking data since 2011, while the near detector was completed in January 2015. With the near detector Double Chooz plans to explore details of the distortion of the neutrino spectrum observed earlier by Double Chooz and other similar experiments. I present an overview of near and far detector performance and show the capability of two neutrino detectors to locate a hidden nuclear reactor.

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