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Poster Session – Submission of Abstract

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Title of the Poster:

The MAJORANA Demonstrator Neutrinoless Double-Beta Decay Experiment

Abstract Text:

The Majorana Collaboration goal is the search for neutrinoless double-beta decay in the isotope Ge-76. Arrays of HPGe detectors will be deployed to serve as both source and detector of the rare decays. The Majorana Demonstrator is a 40kg phase of Ge based neutrinoless double-beta decay experiment located at the Sanford Underground Research Facility in Lead, South Dakota. The goals of the Majorana Demonstrator are to reach the required background level and show scalability in order to progress to a tonne-scale experiment.

Summary:

The Majorana Demonstrator has been running a prototype cryostat, populated with natural Ge detectors, since August 2014. The first deployment of enriched Ge-76 detectors is underway with full deployment of the Majorana Demonstrator planned for the summer of 2015.