



Contribution ID: 373

Type: **Poster**

Production and Acceptance Testing of Enriched Ge Detectors for the Majorana Demonstrator

The MAJORANA DEMONSTRATOR is a neutrinoless double-beta decay experiment utilizing ^{76}Ge as both source and detector in the form of high-purity germanium crystals. The enriched germanium crystal production, delivery, acceptance and characterization programs have been organized to minimize exposure to cosmic muons to lower the impact of induced backgrounds. This is required by the strict experiment background goal of 3counts/(ROI-t-y). As another aspect of background mitigation, it is important to ensure proper crystal performance and have well characterized crystal detectors. For this a program of testing crystal properties has been implemented both at the manufacturer and at the detector site in Lead, South Dakota at the Sanford Underground Research Facility. Results of the completed testing program will be presented.

Primary author: Dr WHITE, Brandon (Oak Ridge National Laboratory)

Presenter: Dr WHITE, Brandon (Oak Ridge National Laboratory)

Track Classification: Neutrinoless Double Beta Decay