

Data Acquisition for the MAJORANA Demonstrator

The MAJORANA DEMONSTRATOR is a low-background array of germanium detectors constructed to demonstrate the feasibility of future neutrinoless double-beta decay measurements in ^{76}Ge . Low-background non-accelerator experiments have unique requirements for their data acquisition and environmental monitoring, which we must consider. Background signals can easily overwhelm the signals of interest, so events which could contribute to the background must be identified or prevented. Data acquisition is a detailed process that runs from the detector itself through a variety of electronics into a digitized signal, and eventually into the readout software and analysis toolchain. This system is designed to be scalable into a large-scale detector array. This poster will summarize this full path of data acquisition for the MAJORANA DEMONSTRATOR.

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