

# The Majorana Demonstrator Calibration System

*Wednesday, September 11, 2013 7:30 PM (2h 30m)*

The Majorana Demonstrator aims to show the feasibility of reducing backgrounds in the search for  $0\nu\beta\beta$  decay of  $^{76}\text{Ge}$  below 1 count/tonne\*year in the 4keV ROI around the Q-value at 2039 keV. In pursuit of this goal, we must characterize individual detectors for both energy resolution and pulse response. We discuss the basic requirements of the Majorana calibration system as informed by Monte-Carlo methods, its physical design, and the automated line source deployment mechanism we've produced to achieve these goals.

**Primary author:** Dr GOETT, Johnny (Los Alamos National Laboratory P-23)

**Presenter:** Dr GOETT, Johnny (Los Alamos National Laboratory P-23)

**Session Classification:** Poster Session

**Track Classification:** Double Beta Decay