

Abstract Submitted
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Studying the Stability of Pulse Shape Analysis in The Majorana Demonstrator Neutrinoless Double Beta Decay Experiment¹ JENNIFER JAMES , Embry-Riddle Aeronautical University, Prescott, MAJORANA COLLABORATION COLLABORATION — The Majorana Demonstrator is an array of germanium detectors built to search for neutrinoless double beta decay of ^{76}Ge . The experimental sensitivity is improved by application of pulse shape analysis (PSA) to identify and reject key backgrounds. One of these, targeting multisite gamma background event topologies, is based on the sharpness of the rising edge of the signal pulse. This project focuses on the stability of this multisite PSA, characterizing the drift of the PSA metric observed in calibration data. The impact of the stability on the signal efficiency and background rejection is studied.

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