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Validation of Pulse Shape Simulation for Ge detectors in the Majorana Demonstrator[1] BENJAMIN SHANKS, Univ of NC - Chapel Hill, MAJORANA COLLABORATION — The MAJORANA DEMONSTRATOR expects to begin searching for neutrinoless double beta decay using ^{76}Ge-enriched detectors in 2015. The DEMONSTRATOR high purity germanium (HPGe) detectors are built in the p-type point contact (PPC) geometry. The electrode of a PPC detector is small and shallow, resulting in low intrinsic capacitance and bulk field strengths compared to the traditional coaxial HPGe configuration. These characteristics allow for discrimination of signal event candidates from background using pulse shape analysis (PSA). In order to fully understand the systematics and efficiencies of PSA cuts, the MAJORANA collaboration has developed a software package to simulate signal generation in PPC detectors. This code has been validated by comparing simulated pulses to the pulse shapes generated for given detectors using an external source.

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