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Low Energy Noise Rejection with the Majorana Demonstrator[1]
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— The MAJORANA DEMONSTRATOR is an array of P-type point contact germanium detectors enclosed in a low-background shield at the Sanford Underground Research Facility. Complementary to its search for the neutrinoless double beta decay of ^{76}Ge are low energy rare event searches for dark matter and solar axions. In the initial run, 10 kg-y of data has been taken over a nearly two-year period. Though its detectors are routinely capable of sub-keV energy thresholds, electronics noise in the array presents a challenge to reliably discriminate physics signals from noise at the lowest energies. In this talk I discuss new noise rejection methods for the DEMONSTRATOR, employing maximum likelihood fits of each waveform and wavelet packet decomposition to maximize the detection potential for low energy physics searches.

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