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Latest Results from the MAJORANA DEMONSTRATOR Neutrinoless Double-Beta Decay Search Experiment¹ INWOOK KIM, Los Alamos National Laboratory, MAJORANA COLLABORATION — The MAJORANA DEMONSTRATOR is searching for neutrinoless double-beta decay of ^{76}Ge in an arrays of p-type, point-contact germanium detectors. It is comprised of 44 kg (30 kg enriched in ^{76}Ge) germanium detectors. With its unprecedented energy resolution of 2.5 keV FWHM and the low background rate of 12 cts/(FWHM t yr) at the ^{76}Ge Q-value of 2039 keV, the DEMONSTRATOR probes the neutrinoless double-beta decay, searching for new physics beyond the standard model. The DEMONSTRATOR has been operating since 2015 at the 4850' level of the Sanford Underground Research Facility. Our published results used 26 kg-yr exposure setting a half-life lower limit of 2.7×10^{25} yr (90% C.L). The amount of collected exposure has doubled since the last release. In this talk, we present the status of the The MAJORANA DEMONSTRATOR and its latest results.

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