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**The Search For Neutrinoless Double Beta Decay With The Majorana Demonstrator**

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The neutrino sector is currently among the most dynamic topics of particle physics. The past two decades have revealed non-zero neutrino masses, large mixing of mass eigenstates compared to the quark sector and “large” values of  $\theta_{13}$ , with the latter permitting observation of possible CP violation in the neutrino sector. If current theoretical prejudices are confirmed by the identification of neutrinos as Majorana fermions, and thus are their own anti-particles, neutrino CP violation also permits leptogenesis and would thus advance our understanding of the generation mechanism of the matter/anti-matter asymmetry in the current universe. This talk will briefly outline the physics and signatures of neutrinoless double beta decay, which would serve as proof of the Majorana nature of the neutrino. The global program of searches for this process will be reviewed, with emphasis given to the MAJORANA DEMONSTRATOR, an experiment featuring arrays of enriched HPGe detectors serving as both source and detector. The DEMONSTRATOR’s design, rich physics reach, and schedule will be detailed. Finally, plans for a ton-scale HPGe experiment to be jointly developed by the MAJORANA and GERDA collaborations will be introduced.