APR15-2015-000819

Abstract for an Invited Paper for the APR15 Meeting of the American Physical Society

Recent Results from Neutrinoless Double-Beta Decay Experiments LINDLEY WINSLOW, MIT

The neutrino is unique among the Standard Model particles. It is the only one that could be its own antiparticle, a Majorana particle. Furthermore, a Majorana neutrino would have profound consequences to particle physics and cosmology. Neutrinoless double-beta decay experiments are the only feasible experiment to determine the Majorana nature of the neutrino and would also provide a measurement of the neutrino mass. In this talk, I will review the status of the field focusing on the most recent results.