

Searches for Neutrinoless Double Beta Decay

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Observation of neutrinoless double beta decay would profoundly impact our understanding of the neutrino. This lepton-number violating process requires new beyond Standard Model physics, would imply that neutrinos are Majorana particles, and provide insight into the nature of neutrino mass. It is thus a highly-sensitive and promising probe of new physics. In this talk, I will present the status of the experimental field, particularly highlighting the recent achievements. The future is bright, with next-generation experimental concepts proposed to leverage these advances and drive the discovery sensitivity of the field down to the $m_{\beta\beta} \sim 10$ meV scale.

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