

# Neutrinoless Double Beta Decay and High-Scale Baryogenesis

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The constraints on baryogenesis models obtained from an observation of neutrinoless double beta decay will be discussed. The lepton number violating processes, which can underlie neutrinoless double beta decay, would together with sphaleron processes, which are effective in a wide range of energies, wash out a primordial baryon asymmetry of the universe. Typically, if a mechanism of neutrinoless double beta decay other than the standard light neutrino exchange is observed, typical scenarios of high-scale baryogenesis will be excluded. This can be achieved by different methods, e.g. through the observation in multiple isotopes or the measurement of the decay distribution. In addition, I will also highlight the connection with low energy lepton flavour violation and lepton number violation at the LHC.

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