

## Review of Double Beta Decay Experiments

Neutrinoless double beta ( $0\nu\beta\beta$ ) decay violates lepton number conservation and it requires two characteristic neutrino properties; non-zero mass and Majorana nature of the neutrino. Assuming the minimal mechanism of the decay, it would constrain the neutrino mass hierarchy and mass scale. In nature, more than 60 of isotopes are known as double beta decay nuclei, however, there is no perfect isotope for the experiment, thus various experiments with different isotope and technique are operated and proposed. In this talk, recent results and future  $0\nu\beta\beta$  decay experiments will be reviewed.

**Primary author:** Dr GANDO, Azusa (RCNS, Tohoku University)

**Presenter:** Dr GANDO, Azusa (RCNS, Tohoku University)