RCNP NEWS colloquium 2020 Oct. 23th 14:00- 16:30



## Part I. Mini-workshop on neutrino nuclear responses for double beta decays

Organizers: Ejiri H, Shima T and Tamii A, RCNP

Properties of neutrinos beyond the standard model are studied by measuring double beta decays (DBDs). Neutrino nuclear responses (squares of the nuclear matrix element NME) are crucial for extracting neutrino properties of particle physics interests and for designing DBD detectors. One key question of the DBD NMEs is the quenching of the DBD NME. The present mini-workshop emphasizes active discussions on recent theoretical and experimental studies of the neutrino nuclear responses for DBD

Session chair Shima T, RCNP

Ejiri H, RCNP Experimental studies of DBD NMEs and the quenching of axial vector NMEs.

Fukuyama T, RCNP Comments: Neutrino mass hierarchy and right-handed weak current in DBD

Iwata Y, Kansai DBD NMEs by Interacting shell model

Zuber K, Dresden Neutrino nuclear interactions and forbidden single-beta decays for DBDs