



Contribution ID: 696

Type: **Parallel Talk**

## KamLAND-Zen 800

*Saturday, 9 July 2022 15:15 (15 minutes)*

KamLAND-Zen searches for neutrinoless double beta (0nbb) decay with Xe-136 loaded liquid scintillator (LS). 0nbb 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.

After successful completion of KamLAND-Zen 400, KamLAND-Zen 800 started data taking in 2019 with almost double amount of xenon and a low radioactive LS container. In this talk, we will present the latest result of KamLAND-Zen 800 with 1 ton yr exposure.

### **In-person participation**

Yes

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