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Type: **Talk**

KamLAND-Zen 800 status and future prospects

Tuesday 22 August 2017 17:30 (30 minutes)

KamLAND-Zen is the neutrinoless double beta decay experiment using ^{136}Xe in the 1,000ton ultra pure liquid scintillator KamLAND. The observation of the neutrinoless double beta decay would help our understanding of neutrino mass and hierarchy by demonstrating the Majorana particle. KamLAND-Zen 400 was ended successfully in 2015. We measured the ^{136}Xe double beta decay life time precisely, and got the limit of neutrinoless double beta decay life time. KamLAND-Zen 800 is a improved experiment using 800kg of ^{136}Xe . This experiment have a potential to survey in inverted hierarchy region of the neutrino mass. I will report KamLAND-Zen 800 status and future prospect.

Topic:

Workshop on Future of Fundamental Physics

Summary

I am sorry. I cannot find suitable tracks and topic. My talk is related to the neutrino mass, neutrino mass hierarchy, lepton-number violation and Majorana nature.

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Session Classification: Parallel session

Track Classification: Workshop on Future of Fundamental Physics - Accelerators in HEP and beyond