

$K_L^0 \rightarrow \pi^0 \nu \bar{\nu}$ Experiment at J-PARC*Friday, 25 May 2007 12:20 (20 minutes)*

J-PARC (Japan Proton Accelerator Research Complex), which intends to provide MW-class super-intense proton beam, is under construction. First slow-beam extraction at 30 GeV is scheduled on December, 2008.

J-PARC-E14 experiment aims at first observation of the rare decay $K_L^0 \rightarrow \pi^0 \nu \bar{\nu}$ using intense K_L^0 beam.

E14 reuses most of the detector and beam-line components for KEK-PS E391a with some necessary modifications and upgrades.

Thus E14 can get ready in a shorter preparation period, and the first physics run is proposed in 2010 to Program Advisory Committee.

In this contribution the strategy, plan and status of the $K_L^0 \rightarrow \pi^0 \nu \bar{\nu}$ experiment at J-PARC will be reported in detail.

Primary author: Dr WATANABE, Hiroaki (KEK)

Presenter: Dr WATANABE, Hiroaki (KEK)

Session Classification: Session VI

Track Classification: Rare decays