

Precise measurement of θ_{13} and Δm^2_{ee} at RENO

The RENO experiment has measured the neutrino mixing angle θ_{13} and Δm^2_{ee} , using reactor antineutrinos from the reactors at Hanbit Nuclear Power Plant since Aug. 2011. In 2016, RENO published results on $\sin^2(2\theta_{13})$ and Δm^2_{ee} using the energy dependent oscillation of reactor antineutrinos in the 500 days of data. RENO has accumulated roughly ~ 2000 days of data with reduced backgrounds and thus decreased systematic uncertainties. Due to the improved statistics and systematic uncertainties we measured $\sin^2(2\theta_{13})$ and Δm^2_{ee} more precisely. In this talk we will present new results from the ~ 2000 days data.

Session and Location

Monday Session, Poster Wall #172 (Ballroom)

Poster included in proceedings:

no

Primary author: Mr LEE, DongHa (Seoul National University)

Co-authors: Prof. ROTT, Carsten (Sunggyungwan University); Mr SIN, Changdong (Jeonnam University); Ms JEONG, Daeun (Sunggyungwan University); Prof. MOON, Dongho (Jeonnam University); Dr KWON, Eunhyang (Seoul National University); Mr JU, Giwon (KAIST); Mr PAC, Gyunghwan (Jeonnam University); Prof. JANG, Hanil (Seoyoung University); Mr LEE, Hyungee (Seoul National University); Dr SEO, Hyunkwan (Seoul National University); Prof. YU, Intae (Sunggyungwan University); Prof. IM, Intaek (Jeonnam University); Prof. KIM, Jaeyool (Jeonnam University); Dr JANG, Jeeseung (GIST); Mr YANG, Jeonglyul (Seoul National University); Mr SEO, Jiwoong (Sunggyungwan University); Mr KIM, Jonggeon (Sunggyungwan University); Prof. YU, Jonghee (KAIST); Mr KIM, Jonghyun (Sunggyungwan University); Dr CHOI, Junho (Dongsin University); Prof. PAC, Myounglyul (Dongsin University); Mr JEON, Sanghoon (Sunggyungwan University); Mr KIM, Sangyong (Seoul National University); Dr SEO, Seonhee (Seoul National University); Mr EVICH, Sergey (kyongbook University); Prof. KIM, Soobong (Seoul National University); Prof. KIM, Wooyoung (kyongbook University); Mr LEE, Yongchang (Seoul National University); Ms PAC, Youngseo (Jeonnam University); Prof. JOO, kyungkwang (Jeonnam University)

Presenter: Mr LEE, DongHa (Seoul National University)

Track Classification: Poster (not participating in poster prize competition)