Abstract for AAP 2017

Title: New results from RENO

The Reactor Experiment for Neutrino Oscillation (RENO) started data-taking since August, 2011 and has successfully measured the smallest neutrino mixing angle θ\_13 in 2012 by observing the disappearance of reactor antineutrinos. Antineutrinos from the six reactors at Hanbit Nuclear Power Plant in Korea are detected and compared by the two identical detectors located at the near and far distances from the reactor array center. In 2016, RENO has published an updated value of θ\_13 and its first measurement of dm^2\_ee based on energy dependent disappearance probability using 500 days of data. As of today, RENO has accumulated about 2000 days of data to update the values of θ\_13 and dm^2\_ee with improved systematic uncertainties. A study has been under progress to find changes in the reactor antineutrino flux and 5 MeV excess with respect to the reactor fuel evolution. In this talk, we present updated results of θ\_13 and dm^2\_ee measurements. In addition, we report the progress in the study on the evolution of observed reactor neutrino yield.