

## Recent Results from RENO

*Thursday, 12 September 2013 14:40 (20 minutes)*

Reactor Experiment for Neutrino Oscillation (RENO) is located in Hanbit nuclear power plant (16.5 GWth) site in S. Korea and has been successfully taking electron anti-neutrino data using two identical liquid scintillator detectors, near (294 m) and far (1.4 km), since August 2011. The smallest neutrino mixing angle,  $\theta_{13}$ , was precisely measured (4.9 sigma) in 2012 using neutrino disappearance consistent with neutrino oscillation. An updated result (5.6 sigma) with increased statistics and reduced systematics was announced in early 2013. In this talk a new result will be presented based on even more data and further reduced systematics with few other improvements in data analysis. A precise measurement of reactor neutrino flux and spectrum will be also presented in comparison with expectations.

**Primary author:** SEO, Seon-Hee (Seoul National University)

**Presenter:** SEO, Seon-Hee (Seoul National University)

**Session Classification:** Low Energy Neutrinos IV

**Track Classification:** Low-Energy Neutrinos (solar, reactor, supernova, and geo neutrinos and also nuclear astrophysics associated with these sources)