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Recent Results from RENO

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Reactor Experiment for Neutrino Oscillation(RENO) started data-taking from August, 2011 and has observed the disappearance of reactor electron antineutrinos, consistent with neutrino oscillations. The experiment has made unprecedentedly accurate measurement of reactor neutrino flux, and performed a definitive measurement of the smallest neutrino mixing angle theta_13 based on the disappearance. Antineutrinos from six reactors at Yonggwang Nuclear Power Plant in Korea, are detected and compared by two identical detectors located at 294 m and 1383 m, respectively, from the reactor array center. In this talk, a new result from RENO will be presented based on the further reduction of backgrounds and several improvements in the analysis. A precise measurement of reactor neutrino flux and spectrum will be also presented in comparison with expectations.

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