

The Daya Bay Reactor Neutrino Oscillation Experiment

Friday, July 17, 2009 11:00 AM (15 minutes)

The Daya Bay reactor neutrino experiment aims to measure the last unknown neutrino mixing parameter θ_{13} with a sensitivity of $\sin^2 2\theta_{13} < 0.01$ at 90% C.L.

The experiment will measure the flux and energy spectrum of reactor antineutrinos through the inverse beta-decay reaction on protons with three sites at different distances from the reactor cores.

This measurement will provide a better understanding of the neutrino mixing matrix and will also give direction to future experiments probing CP violation in the lepton sector and the neutrino mass hierarchy. An overview, current status, and schedule of the experiment will be presented.

Primary author: Mr PEC, Viktor (IPNP Charles University in Prague)

Presenter: Mr PEC, Viktor (IPNP Charles University in Prague)

Session Classification: I. Neutrino Physics

Track Classification: Neutrino Physics