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## To Measure $\theta_{13}$ : The Daya Bay Reactor Neutrino Experiment

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By determining the disappearance rate of anti-neutrinos emitted from the Daya Bay and Ling Ao nuclear power plants in Southeast China, the Daya Bay Reactor Neutrino Experiment will achieve a 1% sensitivity to  $\sin(2\theta_{13})$ . The current best limit, by Chooz, is 17%. Beginning three years of data taking in 2011, Daya Bay will be the most precise of the new generation of experiments intended to determine the magnitude of  $\theta_{13}$ , the smallest, and as yet the only unmeasured, angle in the PMNS mixing matrix. A non-zero value is necessary for CP-violation in the neutrino sector. We present an overview of the technique to be employed and the status of construction.

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