

Abstract Submitted
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The Daya Bay Reactor Neutrino Experiment ZHE WANG, DAYA BAY COLLABORATION — The 3x3 PMNS leptonic mixing matrix relates the mass and flavor eigenstates of the 3 known neutrinos. The θ_{13} mixing angle is the last unknown mixing angle in the PMNS matrix, the parameters of which must be determined experimentally. The Daya Bay experiment will search for the “disappearance” of reactor anti-neutrinos from the Daya Bay and Ling Ao Nuclear Power Plants located in Daya Bay, Guangdong, China using multiple identical detectors at different baselines. The disappearance probability of reactor anti-neutrinos at short baselines of 1-2km is directly proportional to $\sin^2(2\theta_{13})$. The goal of the Daya Bay experiment is to reach a sensitivity of $\sin^2(2\theta_{13}) = 0.01$ at the 90% C.L. The status and prospects of the experiment will be presented.

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