

Abstract Submitted
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The PMT system for the Daya Bay Reactor Neutrino Experiment

WEILI ZHONG, Lawrence Berkeley National Laboratory, DAYA BAY COLLABORATION — The goal of the Daya Bay Reactor Neutrino Experiment is to precisely measure $\sin^2(2\theta_{13})$ to a sensitivity of 0.01 by performing a relative measurement of electron antineutrino events with identical detectors at near and far sites. The antineutrino detectors will be placed in water pools and surrounded by at least 2.5m of water to suppress background. The water pools are also instrumented as Cherenkov detectors for tagging cosmic-ray muons that can generate background. Details of the photomultiplier tubes (PMTs) used in the antineutrino detectors and the water Cherenkov detectors are introduced. Testing results of the PMTs in the first pair antineutrino detectors and the first water pool are also presented.

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