

Abstract Submitted
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The Daya Bay Experiment: Overview and Timeline DAN DWYER,
Caltech, DAYA BAY COLLABORATION — The apparent small size of the neutrino
mixing angle θ_{13} has important implications. The Daya Bay neutrino oscillation
experiment has the greatest sensitivity to $\sin^2 2\theta_{13}$ of all experiments currently under
construction. Our goal is to either determine the size of this mixing angle, or to
establish a limit of $\sin^2 2\theta_{13} < 0.01$. Essential aspects include an extremely high
power reactor facility, four pairs of “identical” detectors to monitor flux near and
far from the the reactor cores, strong control of backgrounds, and an aggressive
and redundant calibration system. We will describe the main components of the
experiment, and present an up-to-date timeline for construction, data taking, and
completion.

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