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Status of the Daya Bay Reactor Neutrino Oscillation Experiment

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The last unknown neutrino mixing angle theta_13 is one of the fundamental parameters of nature; it is also a crucial parameter for determining the sensitivity of future long-baseline experiments aimed to study CP violation in the neutrino sector. Daya Bay is a reactor neutrino oscillation experiment designed to achieve a sensitivity on the value of $\sin^2(2\text{theta}_13)$ to better than 0.01 at 90% CL. The experiment consists of multiple identical detectors placed underground at different baselines to minimize systematic errors and suppress cosmogenic backgrounds. With the baseline design, the expected anti-neutrino signal at the far site is about 360 events/day and at each of the near site is about 1500 events/day. An overview and current status of the experiment will be presented.

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