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Latest results from Daya Bay with full dataset

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The Daya Bay Reactor Neutrino Experiment was designed with the primary goal of precisely measuring the neutrino mixing parameter, θ_{13}. Eight identically-designed gadolinium-doped liquid scintillator detectors installed in three underground experimental halls measure the reactor antineutrinos from six nuclear reactors at different distances. Until its shutdown at the end of 2020, Daya Bay experiment has acquired nearly 6 million inverse beta decay candidates with neutron captured on gadolinium. In this talk, the latest neutrino oscillation analysis results based on full data will be presented. The resulting oscillation parameters are $\sin^2 2\theta_{13} = 0.0851 \pm 0.0024$, $\Delta m^2_{32} = (2.466 \pm 0.060) \times 10^{-3}\mathrm{eV}^2$ for the normal mass ordering or $\Delta m^2_{32} = -(2.571 \pm 0.060) \times 10^{-3}\mathrm{eV}^2$ for the inverted mass ordering, which are the most precise measurement of θ_{13} and Δm^2_{32} so far. Moreover, latest results on other topics such as the search of sterile neutrino and the measurement of absolute flux and spectrum of reactor antineutrino are included as well.

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