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Latest results from Daya Bay experiment based on full dataset

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on behalf of Daya Bay Collaboration

The Daya Bay experiment was planned to precisely measure the neutrino oscillation parameters $\sin^2 2\theta_{13}$ and Δm^2_{32} . The antineutrino flux from six nuclear reactors was measured by eight identically designed liquid scintillator detectors at distances from 400 m to 2 km. Four detectors were located in the two near halls and four detectors were located in the far hall. The experiment has accumulated 5.55×10^6 candidates of the interaction of electron antineutrinos during 10 years of operation. The oscillation parameters are measured with unprecedented precision: $\sin^2 2\theta_{13} = 0.0851 \pm 0.0024$, $\Delta m^2_{32} = (2.466 \pm 0.060) \times 10^{-3} \text{ eV}^2$ assuming the normal mass ordering and $\Delta m^2_{32} = -(2.571 \pm 0.060) \times 10^{-3} \text{ eV}^2$ assuming the inverted mass ordering.

Results of oscillation analysis based on a full dataset will be presented. Additionally, results of the search of sterile neutrinos are included as well.

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