

Latest oscillation results from Daya Bay

Thursday 18 July 2024 08:30 (15 minutes)

The Daya Bay reactor neutrino experiment, pioneering in its measurement of a non-zero value for the neutrino mixing angle θ_{13} in 2012, operated for about nine years from Nov. 24, 2011 to Dec. 12, 2020. Antineutrinos emanating from six reactors with a thermal power of 2.9 GW_{th} were detected by eight identically designed detectors, which were positioned in two near and one far underground experimental halls. This spatial configuration, spanning kilometer-scale baselines between detectors and reactors, facilitates a precise examination of the three-neutrino mixing framework. This talk will show the measurements of θ_{13} and the mass-squared difference by utilizing the Gd-capture tagged sample. Updates on the results derived from the H-capture tagged sample and the search for light sterile neutrinos will also be included.

Alternate track

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Yes

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