The 43rd International Symposium on Physics in Collision - PIC 2024



Contribution ID: 33 Type: not specified

The latest results from Daya Bay

Wednesday 23 October 2024 14:00 (20 minutes)

The Daya Bay reactor neutrino experiment, operated from December 2011 to December 2020, has gathered a record amount of statistical data on reactor neutrino interactions. Antineutrinos from 6 reactor cores were detected through inverse beta decay and identified through neutron capture on gadolinium or hydrogen using eight functionally identical detectors located in three experiment halls. Thanks to the high statistics, well-controlled systematic errors, effective background suppression and precise evaluation, Daya Bay has been providing the most precise measurements of the neutrino mixing angle theta13 in the world. This talk will present the latest results using the full dataset from Daya Bay, spanning from the measurement of neutrino oscillation parameters within the three-neutrino oscillation framework, the search for sterile neutrinos, and measurements of reactor flux and spectra.

Primary author: WU, Qun (Shandong University)

Presenter: WU, Qun (Shandong University)Session Classification: Parallel Session 2