

## Recent oscillation analysis results from Daya Bay

*Friday 29 August 2014 14:00 (20 minutes)*

The Daya Bay Reactor Neutrino Experiment is designed to precisely determine the neutrino mixing angle  $\theta_{13}$  utilizing eight functionally identical electron-antineutrino ( $\bar{\nu}_e$ ) detectors. Using 217 days of data with six detectors, and 404 days with eight detectors, 108907 (613813 and 383402) antineutrino candidates were detected in the far hall (near halls). Combining the neutrino rate deficit and spectral distortion, the Daya Bay experiment made the improved measurement of  $\sin^2 2\theta_{13} = 0.084 \pm 0.005$  and  $\Delta m_{ee} = 2.44_{-0.11}^{+0.10} \times 10^{-3} \text{ eV}^2$ . In this talk, we will focus on the improvement of the detector energy response and backgrounds, the consistency of detectors, and the combined fitting to the six and eight detector data set.

### **WG3: Accelerator Physics (Yes/No)**

No

### **WG2: Neutrino Scattering Physics (Yes/No)**

No

### **WG4: Muon Physics (Yes/No)**

No

### **WG1: Neutrino Oscillation Physics (Yes/No)**

Yes

### **Type of presentation**

Oral presentation

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**Session Classification:** WG1: Neutrino Physics