



SPEAKER: Prof. Yifang Wang (Institute of High Energy Physics (IHEP), Chinese Academy of Sciences,)

TITLE: **Observation of the electron anti-neutrino disappearance at Daya Bay**

DATE: Tue 20/03/2012 15:00

PLACE: Main Auditorium

## ABSTRACT

After 8 years of planning and construction, the Daya Bay reactor neutrino experiment started physics data taking on Dec. 24, 2011. Over 55 days of data taking, first physics results are obtained. The disappearance of electron anti-neutrinos from reactors at a baseline of 1.7 km is observed, consistent with the expectation of the neutrino oscillation.

The measured oscillation amplitude is  $\sin^2 2\theta_{13} = 0.092 \pm 0.016(\text{stat}) \pm 0.005(\text{syst})$ , 5.2 sigma statistically significant from zero.