ICHEP 2016 Chicago



38th INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS

AUGUST 3 - 10, 2016 CHICAGO

Contribution ID: 123

Type: Oral Presentation

Recent Results of Electron-Neutrino Appearance Measurement at NOvA (13' + 2')

Saturday, 6 August 2016 14:20 (15 minutes)

NOvA is a long-baseline accelerator-based neutrino oscillation experiment that is optimized for NuE measurements. It uses the upgraded NuMI beam from Fermilab and measures electron-neutrino appearance and muon-neutrino disappearance at its Far Detector in Ash River, Minnesota. The NuE appearance analysis at NOvA aims to resolve the neutrino mass hierarchy problem and to constrain the CP-violating phase. The first measurement of electron-neutrino appearance in NOvA based on its first year's data was produced in 2015, providing solid evidence of NuE oscillation with the NuMI beam line and some hints on mass-hierarchy and CP. This talk will discuss the second NuE oscillation analysis at NOvA, which is based on 2 years of data.

Primary author: BIAN, Jianming (UC Irvine)

Presenter: BIAN, Jianming (UC Irvine)

Session Classification: Neutrino Physics

Track Classification: Neutrino Physics