



Irfu

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Séminaire
DPhP

Lundi 11/06/2018, 11h00

CEA-Saclay Bât. 141, salle André Berthelot

Latest Neutrino Oscillation Results from NOvA

SHIQI YU

Argonne National Laboratory, USA

NOvA is a long-baseline neutrino oscillation experiment at Fermilab. It uses two detectors, the Near Detector at Fermilab and the Far Detector at a distance of 810 km at Ash River, Minnesota. These two functionally identical liquid scintillator calorimeters are 14 mrad off-axis from the beam, providing a neutrino flux narrowly peaked at around 2 GeV. NOvA measures the rate of ν_e appearance and ν_μ disappearance at the Far Detector in the ν_μ beam produced by the NuMI facility at Fermilab. NOvA aims to resolve the neutrino mass hierarchy and constrain the CP-violating phase and determine the octant of θ_{23} . In this talk, I will present NOvA's first results with neutrino and anti-neutrino beams.

Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Martine Oger, tél. 01 69 08 23 50, e-mail : martine.oger@cea.fr. (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).