

Séminaire LAL

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Mardi 1^{er} octobre 2019 à 11h00

Updated Neutrino and Antineutrino Results from NOvA

The discovery of the third neutrino mixing angle, θ_{13} , in 2012 opened a door to discovering if CP symmetry is violated in the lepton sector, and the ordering of the neutrino mass eigenstates. NOvA is exploring this new landscape by measuring the appearance of electron (anti)neutrinos in a beam of muon (anti)neutrinos. Recently we have obtained the first evidence for electron antineutrinos appearing in a beam of muon antineutrinos. With a baseline of 810 km NOvA has nearly triple the matter effect of T2K and sensitivity to the mass hierarchy. In this talk I will present NOvA's very latest results (new for summer 2019) and show what we've learnt about neutrinos and antineutrinos. Beyond our current results I will take a look to the future.

Salle 101 - Bât. 200, Orsay

Organisation :

Joao Coelho - Thibaud Louis - Aurélien Martens - Dimitris Varouchas (LAL) - seminaires@lal.in2p3.fr

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