



EP Seminar

SPEAKER: **HARTNELL, J. (University of Sussex)**

TITLE: **Neutrino Oscillation Results from NOvA**

DATE: Tue 15/11/2016 11:00

PLACE: 500-1-001 - Main Auditorium

ABSTRACT

NOvA is an accelerator long-baseline neutrino oscillation experiment optimised to measure electron neutrino appearance in a high-purity beam of muon neutrinos from Fermilab. The exciting discovery of the θ_{13} neutrino mixing angle in 2012 has opened a door to making multiple new measurements of neutrinos. These include leptonic CP violation, the neutrino mass ordering and the octant of θ_{23} . NOvA with its 810km baseline and higher energy beam has about triple the matter effect of T2K which opens a new window on the neutrino mass ordering. With about 20% of our design beam exposure and significant analysis improvements we have recently released updated results. I will present both our disappearance and appearance measurements.