## PASCOS 2016: 22nd International Symposium on Particles, Strings and Cosmology



Contribution ID: 133 Type: not specified

## **Results from the NOvA Experiment**

Wednesday, 13 July 2016 11:00 (20 minutes)

NOvA is a long-baseline accelerator-based neutrino oscillation experiment that is optimized for  $\nu_{\mu}-\nu_{e}$  measurements. It uses the upgraded NuMI beam from Fermilab and measures  $\nu_{e}$  appearance and  $\nu_{\mu}$  disappearance at its Far Detector in Ash River, Minnesota. The  $\nu_{e}$  appearance analysis at NOvA aims to resolve the neutrino mass hierarchy problem and to constrain the CP-violating phase. The first data set of 2.74 x  $10^{20}$  protons on target equivalent exposure taken by was analyzed in 2015 and provided evidence of  $\nu_{\mu}-\nu_{e}$  oscillation. At PASCOS we plan to update the community with new analyses using approximately twice the beam exposure.

## **Summary**

Co-author: GROUP, Robert (University of Virginia)Presenter: Dr DAVIES, Gavin (Indiana University)

Session Classification: Parallel I

Track Classification: Neutrino Physics