SES14-2014-000048

Abstract for an Invited Paper for the SES14 Meeting of the American Physical Society

Status of the NOvA Experiment ROBERT GROUP, University of Virginia and Fermilab

The recently-completed NuMI Off-Axis Nu-e Appearance experiment (NOvA) will use the upgraded NuMI neutrino source at Fermilab and a 14-kton detector at Ash River, Minnesota to explore the neutrino sector. NOvA uses a highly-active, finely-segmented detector that offers superb event identification capability, allowing precision measurements of electron (anti-)neutrino appearance and muon (anti-)neutrino disappearance. Through these studies NOvA will provide constraints on theta-13, theta-23, the atmospheric mass splitting, the neutrino mass hierarchy, and the CP-violating phase. This talk will review NOvA's broad physics scope and the expected timeline for first physics.