Abstract Submitted
for the APR17 Meeting of
The American Physical Society

Electron Neutrino Appearance Analysis in MINOS+ DUNG PHAN, The University of Texas, Austin, MINOS+ COLLABORATION — MINOS+, the successor of MINOS experiment, has taken data from September 2013 to July 2016. Utilizing the Fermilab NuMI beam operating in the medium energy setting, MINOS+ analyses aimed to not only cross-check the MINOS results on the conventional three-flavor model but also search for the possible existence of sterile neutrinos and other exotic phenomena. By conducting the electron neutrino appearance analysis within the framework of 3+1 model, new limits on the sterile mass-squared different Δm^2_{41} and the mixing angle $\sin^2(2\theta_{\mu e})$ can be set, allowing a direct comparison to the LNSD anomaly.

Dung Phan
The University of Texas, Austin

Date submitted: 29 Sep 2016 Electronic form version 1.4