

Abstract Submitted  
for the APR16 Meeting of  
The American Physical Society

**Latest Results from MINOS and MINOS+** SIMON DE RIJCK, Univ of Texas, Austin, MINOS COLLABORATION, MINOS+ COLLABORATION — The MINOS experiment, with a beam peak energy of 3 GeV, ran for ten years collecting beam neutrino and antineutrino data samples as well as an atmospheric neutrino data sample. The MINOS standard three-flavor oscillation analysis of the combined charged current  $\nu_\mu$  and  $\bar{\nu}_\mu$  beam,  $\nu_\mu$  and  $\bar{\nu}_\mu$  atmospheric, and  $\nu_e$  and  $\bar{\nu}_e$  appearance samples yielded some of the best constraints on the atmospheric neutrino oscillation parameters to date. The MINOS+ experiment started taking data in September 2013 using a neutrino beam designed for the NO $\nu$ A experiment with an energy peak shifted to 7 GeV. The shift to higher neutrino energies leads to improved sensitivity to exotic phenomena including sterile neutrinos, large extra dimensions, and non-standard interactions. We will discuss the latest MINOS results and the status and plans for the MINOS+ experiment.

Simon De Rijck  
Univ of Texas, Austin

Date submitted: 08 Jan 2016

Electronic form version 1.4