

Abstract Submitted
for the 4CF17 Meeting of
The American Physical Society

The Short Baseline Program at Fermilab TYLER BOONE, ROBERT WILSON, Colorado State Univ — The Short Baseline Neutrino (SBN) program at Fermilab will measure the muon- and electron-neutrino spectra at three locations in the Booster Neutrino Beam. The primary goal of the program is to search for evidence of sterile neutrinos; by assuming a 3 (known) +1 (sterile) neutrino mass model we will explore an area of mass difference phase space $\delta m^2 \approx 1 \text{ eV}^2$ region that could explain the MiniBooNE and LSND anomalies. The experiment will also be beneficial to future neutrino experiments through the experience gained with the use of three liquid argon time projection chambers (LArTPCs), SBND, MicroBooNE, and the ICARUS T600. We We will present an overview of the experiment and summarize the ongoing Colorado State University group contributions.

Tyler Boone
Colorado State Univ

Date submitted: 20 Sep 2017

Electronic form version 1.4