

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Status, Plan, and Physics Potential of the ICARUS T600 Experiment¹ HECTOR CARRANZA², University of Texas at Arlington, ICARUS COLLABORATION — The ICARUS T600 detector is the first large-scale Liquid Argon Time Projection Chamber. With an active mass of around 470 tonnes of liquid argon, it had a very successful three-year data taking run at the underground Larboartori Nazionali Gran Sasso (LNGS), Italy. The detector was then moved to CERN for upgrades and subsequently moved to Fermi National Accelerator Laboratory in the United States in 2017. Here, it will function as the far detector in the Short Baseline Neutrino (SBN) program with the main purpose of studying neutrino oscillations over short propagation distances in which possible sterile neutrino states would manifest. At the end of 2019, the installation of the detector was in its final stages, and detector commissioning will soon be underway. In this talk, I will present the current status and plan for physics data taking, as well as the physics potential of the experiment.

¹US Department of Energy

²On behalf of the ICARUS collaboration

Hector Carranza
University of Texas at Arlington

Date submitted: 14 Jan 2020

Electronic form version 1.4