

# ICARUS at the Short-Baseline Neutrino program: first results

*Thursday 18 July 2024 09:30 (15 minutes)*

The ICARUS collaboration employed the 760-ton T600 detector in a successful three-year physics run at the underground LNGS laboratory, performing a sensitive search for LSND-like anomalous  $\nu_e$  appearance in the CNGS beam. After a significant overhaul at CERN, the T600 detector has been installed at Fermilab where, in June 2022, the data taking for neutrino oscillation physics began collecting events from BNB and NuMI off-axis beams. ICARUS aims at first to either confirm or refute the claim by Neutrino-4 short-baseline reactor experiment. It will also perform measurements of neutrino cross sections in LAr with the NuMI beam and several BSM searches. ICARUS will soon jointly search for evidence of sterile neutrinos with the Short-Baseline Near Detector (SBND). In this presentation, preliminary results from the ICARUS data with the BNB and NuMI beams are shown both in terms of performance of all ICARUS subsystems and of capability to select and reconstruct neutrino events.

## Alternate track

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