
Contribution ID: **48** Type: **not specified**

# Overview of the sterile neutrino searches and status of SBN/ICARUS experiment

*Tuesday 22 October 2024 17:10 (40 minutes)*

The results of short-baseline oscillation experiments have raised the possibility of the existence of light sterile neutrino states in the eV mass range. As a result, there has been a surge in new experimental efforts to definitively approve or disapprove the oscillations between active and sterile neutrino states. This new neutrino, if confirmed, would be a Standard Model gauge singlet, hence dubbed "sterile." The discovery or exclusion of this sterile neutrino could have far-reaching implications for particle physics, as well as astrophysics and cosmology. In this presentation, I will provide an overview of the ongoing searches for sterile neutrinos and discuss the progress and plans for the ICARUS and SBND experiments as part of the Short-Baseline Neutrino program at Fermilab.

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**Session Classification:** Plenary Session