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# Experimental searches of neutrino anomalies

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Several anomalies had been collected for two decades in the neutrino sector beyond an ordinary 3-flavour mixing picture, suggesting the existence of some additional new related states.

Liquid argon TPC (LAr-TPC) is an ideal detection technology for neutrino physics, combining excellent 3D spatial reconstruction and calorimetry. The ICARUS-T600 detector has been the first large scale detector of this typology and its operation with the CNGS neutrino beam proven the maturity of the technique, while providing important results.

After a significant overhauling at CERN, the T600 detector has now been placed in its experimental hall at Fermilab where installation activities are in progress. It will be soon exposed to clarify in a definitive way the open questions of the presently observed neutrino anomalies. The contribution will address ICARUS achievements and plans for the sterile neutrino search at Fermilab. Data taking will begin during 2021.

## Collaboration name

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**Session Classification:** Opening Plenary Session