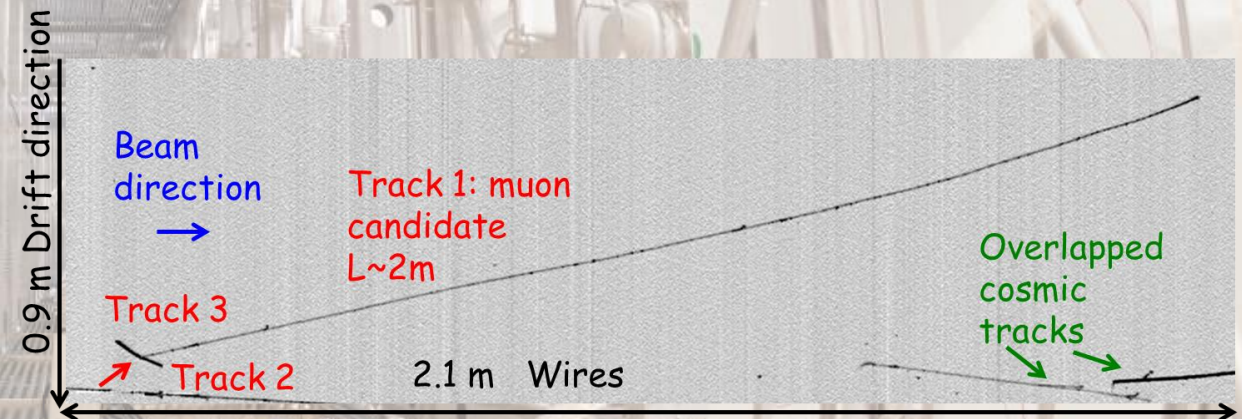


Short-Baseline neutrino oscillation searches with the ICARUS detector at FNAL



- The Short-Baseline Neutrino (SBN) program aims to confirm or definitely rule out the existence of sterile neutrinos at the eV mass scale by measuring the ν_e appearance and the ν_μ disappearance oscillation channel by means of Liquid Argon Time Projection Chambers (LArTPC) at Near (110 m) and Far (600 m) positions along the Booster neutrino beam at Fermilab.
- The SBN Far Detector, ICARUS T600, is a self-triggering detector with 3D imaging and calorimetric capabilities allowing accurate reconstruction of neutrino interactions.
- A Cosmic Ray Tagger (CRT) system ensuring a 4π coverage of ICARUS T600 is used to distinguish cosmics entering the detector from particles originated inside the TPC.



Reconstructed hit positions

