Contribution ID: 455 Type: Parallel Talk

SBND-PRISM: Sampling Multiple Off-Axis Neutrino Fluxes with the Same Detector

Friday, 8 July 2022 10:15 (15 minutes)

The Short Baseline Near Detector (SBND), a 112 ton liquid argon time projection chamber, is the near detector of the Short Baseline Neutrino program at Fermilab. SBND has the unique characteristic of being remarkably close (110 m) to the neutrino source and not perfectly aligned with the neutrino beamline, in such a way that the detector is traversed by neutrinos coming from different angles with respect to the beam axis. This is known as the PRISM feature of SBND, which allows sampling of multiple neutrino fluxes using the same SBND detector. SBND-PRISM can be utilized to study distinctive neutrino-nucleus interaction and exotic physics signals.

In-person participation

Yes

Primary author: Dr DEL TUTTO, Marco (Fermilab)

Presenter: Dr DEL TUTTO, Marco (Fermilab)Session Classification: Neutrino Physics

Track Classification: Neutrino Physics