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SBND-PRISM: Sampling Multiple Off-Axis Neutrino Fluxes with the Same Detector MARCO DEL TUTTO, ORNELLA PALAMARA, Fermilab, VISHVAS PANDEY, University of Florida, SBND COLLABORATION — The Short Baseline Near Detector (SBND), a 112 ton liquid argon time projection chamber detector, is the near detector of the Short Baseline Neutrino program at Fermilab. Due to its proximity to the neutrino source (110 m) SBND is sensitive to some distinctive characteristics. Here we present SBND-PRISM: an intrinsic and unique feature of the SBND experiment. Since the neutrino beam direction is offset from the center of SBND, some regions of the detector are exposed to neutrinos that are off-axis from the beam direction. This prism-like feature 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.

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