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# Latest Results from the SND@LHC Experiment

The SND@LHC detector is a compact, stand-alone experiment designed to measure neutrinos produced at the LHC in a previously unexplored region of pseudorapidity, specifically between 7.2 and 8.6. This region complements those covered by other LHC experiments. The detector is situated 480 meters downstream from IP1 in the unused TI18 tunnel. It is composed of a hybrid system based on an 800 kg target mass of tungsten plates, interleaved with emulsion and electronic trackers, followed downstream by a calorimeter and a muon system. This configuration allows for efficient discrimination among all three neutrino flavors and provides a unique opportunity to investigate heavy-flavor production at the LHC in a kinematic region that is inaccessible to ATLAS, CMS, and LHCb. This region is also particularly significant for future circular colliders and for predicting very high-energy atmospheric neutrinos. Additionally, the detector concept is well-suited for searching for Feebly Interacting Particles by observing signatures of scattering in the detector target. Since 2022, the experiment has collected 309 $fb^{-1}$ of data with an efficiency of 97%.
Using data from the electronic detectors, interactions with muon neutrinos have been identified, along with solid evidence for interactions with electron neutrinos. In this presentation, we will share results from data collected in 2025, including an analysis of the muon flux, which has greatly enhanced our understanding of the behavior of LHC beams. The reconstruction of emulsion data has now achieved sub-micrometer resolution, and significant progress has been made in vertex finding and electromagnetic shower recognition.

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