



ID de la contribución : 1034

Tipo : Talk

Searches for physics beyond the Standard Model at the Short-Baseline Near Detector (SBND)

miércoles, 19 de noviembre de 2025 15:30 (15)

The Short-Baseline Near Detector (SBND) is a 112-ton liquid argon time projection chamber 110 m away from the Booster Neutrino Beam (BNB) target at Fermilab (Illinois, USA). In addition to its role as the SBN program's near detector, enabling precision searches for short-baseline neutrino oscillations, the proximity of SBND to the BNB target makes the experiment ideal for many beyond the Standard Model (BSM) searches for new particles produced in the beam. The nanosecond-timing resolution of the scintillation light detectors further boosts the experiment capabilities. In this talk, we present the status and expected sensitivity to new BSM particles produced in the decay of mesons and in proton-target interactions.

Abstract

Primary author(s) : ROMEO, Jorge (CIEMAT)

Presenter(s) : ROMEO, Jorge (CIEMAT)

Clasificación de la sesión : RENATA (Red Nacional Temática de Astropartículas)

Clasificación de temáticas : Red Temática de Astropartículas (RENATA)