



ID de Contribution: 325

Type: Non spécifié

Neutrino Physics with the Strong Scattering Scintillating Medium Detectors

mercredi 19 novembre 2025 17:00 (15 minutes)

The strong scattering scintillation medium detector is a novel concept for next-generation position-sensitive detectors requiring no segmentation. Its operating principle is based on localizing scintillation light near its emission point using an optically scattering medium. Our design employs a solid granular organic scintillator coupled with an array of wavelength-shifting fibers and SiPMs for light collection. This report presents the results of the MC simulation, optimized using data from a beam test conducted on a 10 cm-scale prototype. Key characteristics and procedures, including energy and spatial resolutions, as well as event and track reconstruction, are discussed.

Auteurs: KRAPIVA, Artemiy (LPI); SVIRIDA, Dmitry (LPI)

Orateur: KRAPIVA, Artemiy (LPI)

Classification de Session: Neutrinos