INFN
Istituto Nazionale di Fisica Nucleare
Laboratori Nazionali di Frascati

ROMA TRE
UNIVERSITÀ DEGLI STUDI

Unraveling Dark Matter and neutrino mysteries with a scotogenic approach

lundi 15 avril 2024 16:40 (25 minutes)

We present a study of a scotogenic model addressing the dark matter problem while generating three non-zero neutrino masses. We investigate the dual nature of a dark matter candidate emerging from distinct particle components across diverse energy regimes within the energy range of HL-LHC. Results highlight the behavior of the dark matter candidate in varied energy contexts, with a focus on correlations with neutrino masses. Furthermore, we will pay attention to experimental constraints, particularly from lepton flavor violating observables, delivering a comprehensive overview of the model's implications for advancing our understanding of fundamental particles.

Auteurs principaux: DE NOYERS, Ugo (LAPTh / Université Savoie Mont Blanc); SARAZIN, Maud (Lapth); HERRMANN, Björn (LAPTh / Université Savoie Mont Blanc)

Orateur: DE NOYERS, Ugo (LAPTh / Université Savoie Mont Blanc)

Classification de Session: Beyond the Standard Model

Classification de thématique: Beyond the Standard Model