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Neutrino masses and mixing from milli-charged dark matter

Wednesday 16 October 2024 17:45 (15 minutes)

In this talk, we present a model for the radiative neutrino mass mechanism in which the particles within the loops are characterized by milli-charges. Unlike the conventional scotogenic model, our approach avoids imposing a discrete symmetry or expanding the gauge sector. The minuscule electric charges ensure the stability of the lightest particle within the loop as a viable dark matter candidate. Our investigation systematically scrutinizes the far-reaching phenomenological implications arising from these minuscule charges.

Track type

Dark Matter

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