Contribution ID: **97** Type: **not specified**

# Comprehensive Phenomenology of the Dirac Scotogenic Model: Novel Low-Mass Dark Matter

*Tuesday 8 July 2025 15:40 (20 minutes)*

The Dirac Scotogenic model provides an elegant mechanism for generating small Dirac neutrino masses at the one-loop level. A single abelian discrete $\mathcal{Z}_6$ symmetry simultaneously protects the "Diracness" of the neutrinos and the stability of the dark matter candidate. This symmetry originates as an unbroken subgroup of the so-called *445* $U(1)_{B-L}$ symmetry.
Here, we thoroughly explore the phenomenological implications of this construction, including an analysis of
electroweak vacuum stability, charged lepton flavor violation, and the dark matter phenomenology. After considering all constraints, we also show that the model allows for the possibility of novel low-mass scalar and fermionic dark matter, a feature not shared by its canonical Majorana counterpart.

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**Session Classification:** Parallel 2