

# Phenomenology of Scotogenic 3-loop Neutrino Mass Models

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Radiative seesaw models are examples of testable extensions of the SM to explain the light neutrino masses. In radiative seesaw models at 1-loop level, such as the popular scotogenic model, in order to successfully reproduce neutrino masses and mixing, one has to rely either on unnaturally small Yukawa couplings or on a very small mass splitting between the CP-even and CP-odd components of the neutral scalar mediators. We discuss here scotogenic-like models where light-active neutrino masses arise at the three-loop level, providing a more natural explanation for their smallness. The proposed models are in general consistent with the neutrino oscillation data and allows to accommodate the measured dark matter relic abundance. Specific realizations also allow to explain the W-mass anomaly and the baryon asymmetry of the Universe via leptogenesis. We explore the rich phenomenology of these models, in particular in near future lepton flavor violation experiments.

## Alternate track

1. Beyond the Standard Model

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