

# Radiate Neutrino masses, keV-scale DM and viable Leptogenesis via sub-TeV new physics

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This work is based on the so-called Scotogenic model which enhances the Standard Model with a second Higgs doublet and three right-handed neutrinos as gauge singlets. An additional  $Z_2$  symmetry is proposed under which all new particles are charged.

This allows for a stable DM candidate in the keV-range and a radiative generation of active neutrino masses. Also I want to address the question of baryogenesis in this model framework. A baryon asymmetry is generated via sub-TeV Leptogenesis which incorporates lepton number conserving oscillations among the RH neutrinos and lepton number violating decays of the second Higgs doublet.

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