

Dilution generated sterile neutrino dark matter

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We present a model where a keV–MeV scale sterile neutrino plays the role of cold dark matter. This is accomplished by having a heavier (GeV–TeV scale) sterile neutrino decay out-of-equilibrium to generate vast amounts of entropy. This process of dilution modifies the number densities and spectra of the lighter neutrino, allowing it to evade existing constraints and behave as cold dark matter.

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