

# The cosmology of ultralight scalar dark matter coupled to right-handed neutrinos

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Ultralight dark matter (ULDM) must be bosonic, and the arguably simplest model is furnished by a scalar field that is uncharged under the Standard Model gauge group oscillating in a harmonic potential. This field will generically couple to other BSM singlet states such as sterile neutrinos or other progenitors of neutrino mass. In this talk I will discuss how interactions between ULDM and neutrinos can alter the subsequent cosmology of an ULDM candidate.

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