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# Sterile neutrino limits from cosmo

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Light sterile neutrinos (eV scale), suggested by different anomalies observed in short-baseline neutrino oscillation experiments, can be produced in the early universe by oscillations with the active neutrinos and can affect different cosmological observables: Big Bang Nucleosynthesis (BBN),
Cosmic Microwave Background (CMB) and Structure Formation (LSS). Indeed, if the sterile neutrinos are sufficiently light, they can increase the radiation content of the universe (parametrized in terms of the effective number of relativistic degrees of freedom Neff) . Moreover they contribute to the matter density at later time leaving a peculiar imprint on structure formation.
We will discuss the mass and radiation limits on eV sterile neutrinos coming from the cosmological observations, also in relation to the recent data of Planck collaboration.

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