

Thermal leptogenesis from a low-scale seesaw.

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The implications of requiring the necessary generation of the baryon asymmetry via the decay of heavy sterile neutrinos on the parameter space of the Inverse Seesaw (ISS) and Linear Seesaw (LSS) is explored. Often in such low-scale seesaw scenarios a natural mass degeneracy occurs resulting in a relatively small mass splittings amongst sterile neutrinos, allowing for a resonant enhancement in the amount of asymmetry generated per sterile decay.

Simple scenarios of these low-scale seesaws are considered as well as scenarios where a particular lepton flavour symmetry ansatz is adopted. Additionally, motivated by the fact that the Dirac phase in the PMNS matrix is the only CP-violating parameter in the leptonic sector that can be measured in neutrino oscillation experiments, we examine the possibility that it is the dominant source of CP violation in these scenarios.

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