

Testable Leptogenesis

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We revisit the production of baryon asymmetries in the minimal type I seesaw model with heavy Majorana singlets in the GeV range. In particular we include for the first time “washout” effects from scattering processes with gauge bosons and higgs decays and inverse decays, besides the dominant top scatterings. We show that in the minimal model with two singlets, and for an inverted light neutrino ordering, future measurements from SHiP and neutrinoless double beta decay could in principle provide sufficient information to predict the matter-antimatter asymmetry in the universe up to a sign. We also show that SHiP measurements could provide very valuable information on the PMNS CP phases.

Summary

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