

Mapping the viable parameter space for testable leptogenesis

Friday, 29 October 2021 15:00 (20 minutes)

In this talk, we present a new comprehensive study of the allowed parameter space within which type-I seesaw-based leptogenesis with three heavy neutrinos is possible. We include both freeze-in (ARS leptogenesis) and freeze-out (resonant leptogenesis) mechanisms. We show that, in presence of an approximately degenerate heavy neutrino mass spectrum, leptogenesis is feasible across the whole experimentally accessible mass range all the way up to the TeV-scale and for active-sterile mixing considerably larger than in the minimal scenario where only two heavy neutrinos are present. Such large mixing would open up the possibility to perform consistency checks of the model.

Talk based on the following article: [arXiv:2106.16226].

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Particle physics

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