Contribution ID : **127** Type : **Poster**

Neutrino masses and leptogenesis in a L_e-L_mu-L_tau based model

Monday, 30 August 2021 19:15 (15)

We present a simple extension of the Standard Model with three right-handed neutrinos in a SUSY framework, with an additional U(1) abelian flavor symmetry with a non standard leptonic charge for lepton doublets and arbitrary right-handed charges. We show how it is possible to provide the correct prediction for the mixing angles of the PMNS matrix and for the parameter with a moderate fine tuning. The baryon asymmetry of the Universe is generated via thermal leptogenesis through CP-violating decays of the heavy right-handed neutrinos. We present a detailed numerical solution of the relevant Boltzmann equations accounting for the impact of the distribution of the asymmetry in the three lepton flavors.

Reference to paper (DOI or arXiv)

Your gender (free text)

Primary author(s) : MARCIANO, Simone (Università di Roma, La Sapienza); Dr. ARCADI, Giorgio (Università di Roma Tre); Prof. MELONI, Davide (Università di Roma Tre)

Presenter(s) : MARCIANO, Simone (Università di Roma, La Sapienza)

Session Classification : Poster session 1

Track Classification : Neutrino physics and astrophysics