

Discriminating Dirac and Majorana neutrino CP phases in the light of thermal leptogenesis in type I+II seesaw models.

We study the effects of Dirac and Majorana CP phases in the origin of baryon asymmetry of the Universe through the mechanism of the leptogenesis. In this work we also try to connect neutrino CP phases, lightest neutrino mass and baryogenesis within the framework of a model where both type I and type II seesaw contribute to the neutrino mass. Type I seesaw mass matrix considered as a TBM type neutrino mass matrix which gives zero θ_{13} whereas type II seesaw acts as a correction to generate nonzero θ_{13} . Considering type II seesaw mass matrix as a subleading and equally dominating compared to type I seesaw, we try to constrain all these experimentally undetermined neutrino parameters namely Dirac and Majorana CP phases and lightest neutrino mass from the requirement of producing correct baryon asymmetry of the Universe.

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