FLASY 2018: 7th Workshop on Flavour Symmetries and Consequences in Accelerators and Cosmology



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Neutrino CP Violation and Sign of Baryon Asymmetry

Wednesday 4 July 2018 11:30 (30 minutes)

We discuss the correlation between the CP violating Dirac phase and the baryon asymmetry of the universe based on the leptogenesis in the minimal seesaw model.

In our model, we introduce two right-handed Majorana neutrinos and consider the trimaximal mixing matrix in the neutrino flavors. Because there is only one phase parameter in our model, the sign of the CP violating Dirac phase at low energy is fixed by the observed baryon asymmetry of the universe. According to the recent T2K and NOvA data of the CP violation, the Dirac neutrino mass matrix of our model is fixed only for the normal hierarchy of neutrino masses.

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