



Contribution ID: 217

Type: **not specified**

Leptogenesis without Loops

Thursday 24 October 2019 16:00 (20 minutes)

We propose a new testable leptogenesis mechanism where the lepton asymmetry is generated from the interference of tree-level diagrams only. As a concrete example, we consider an amalgamation of the scotogenic model with an inert Higgs doublet and right-handed neutrinos, along with an electroweak-triplet scalar for a type-II seesaw. The imaginary part needed for the required CP-asymmetry comes from the trilinear coupling of the inert-doublet with the triplet. Neutrino mass is generated by both scotogenic and type-II seesaw contributions. The neutral component of the inert Higgs doublet serves as the dark matter candidate.

Presenter: DASGUPTA, Arnab (School of Liberal Arts, Seoul National University of Science and Technology)

Session Classification: Baryogenesis