

# Type II Seesaw Leptogenesis

*Monday 5 December 2022 14:20 (20 minutes)*

The Type II Seesaw Mechanism provides a minimal framework to explain the neutrino masses involving the introduction of a single triplet Higgs to the Standard Model. We have demonstrated that this triplet Higgs alone can simultaneously generate the observed baryon asymmetry of the universe and the neutrino masses while playing a role in setting up Inflation. This is achievable with masses as low as 800 GeV, and predicts that the neutral component obtains a small vacuum expectation value  $v_\Delta < 10$  keV. I will discuss the rich phenomenology of our model which can be tested by various terrestrial experiments as well as by cosmological observations. In particular, the successful parameter region may be probed at a future 100 TeV collider, upcoming lepton flavor violation experiments such as Mu3e and COMET, and neutrinoless double beta decay experiments.

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**Session Classification:** Early Universe

**Track Classification:** Inflation and early Universe cosmology