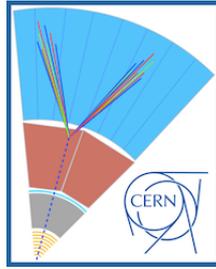


# Searching for long-lived particles at the LHC and beyond: Eighth workshop of the LHC LLP Community



Contribution ID: 44

Type: **not specified**

## Uniting low-scale leptogenesises (12'+3')

*Thursday 19 November 2020 17:05 (15 minutes)*

In this talk we will demonstrate that what was previously considered as different mechanisms of baryon asymmetry generation involving two right-handed Majorana neutrinos with masses far below the GUT scale – leptogenesis via neutrino oscillations and resonant leptogenesis – are actually united. We show that the observed baryon asymmetry can be generated for all experimentally allowed values of the right-handed neutrino masses above  $M \gtrsim 100$  MeV. Leptogenesis is effective in a broad range of the parameters, including mass splitting between two right-handed neutrinos as big as  $\Delta MN/MN \sim 0.1$ , as well as mixing angles between the heavy and light neutrinos large enough to be accessible to planned intensity experiments or future colliders.

**Presenter:** KLARIC, Juraj (EPFL - Ecole Polytechnique Federale Lausanne (CH))

**Session Classification:** New ideas