



Contribution ID: 289

Type: **Parallel Talk**

Searches for Heavy Neutral Leptons in CMS

Saturday, 9 July 2022 17:45 (15 minutes)

The smallness of neutrino masses, together with neutrino oscillations could be pointing to physics beyond the standard model, can be naturally accommodated by the so-called “seesaw” mechanism, in which new Heavy Neutral Majorana Leptons (HNL) are postulated. Several models with HNLs exist that incorporate the seesaw mechanism, sometimes also providing a DM candidate or giving a possible explanation for the baryon asymmetry. This talk presents searches for HNLs interpreted in such models, using both prompt and long-lived signatures in CMS using the full Run-II data-set collected at the LHC.

In-person participation

Yes

Primary author: VERMASSEN, Basile**Co-author:** MEYER, Arnd**Presenter:** VERMASSEN, Basile**Session Classification:** Beyond the Standard Model**Track Classification:** Beyond the Standard Model