Contribution ID: 86 Type: Poster Presentation

Search for heavy Majorana neutrinos at LHC using the CMS detector

Monday 26 August 2019 19:00 (2 hours)

We present a search for heavy Majorana neutrinos, using pp collision data collected with the CMS detector at the centre-of-mass energy of 13 TeV in 2016. The search targets for heavy neutrino in the Type-I seesaw mechanism where the mass ranges from 20 GeV to 1300 GeV, which is wider range than the study performed using the 8 TeV data. The vector boson fusion production channel is also considered in addition to the schannel, which improves the sensitivity for masses above several hundreds of GeV. We set upper limits on mixing parameters with standard model neutrinos as a function of heavy neutrino mass.

Working Group

WG5 : Neutrinos Beyond PMNS

Primary authors: JEON, Si Hyun (Seoul National University (KR)); ALMOND, John Leslie (Seoul National

University (KR))

Presenter: JEON, Si Hyun (Seoul National University (KR))

Session Classification: Poster session