

Search for heavy Majorana neutrinos at LHC using the CMS detector

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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 s-channel, 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

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