

Probing the Light Sterile Neutrino Through the Heavy Charged Higgs Decay at the LHC

Saturday 7 July 2018 15:00 (15 minutes)

We show the 13 TeV proton-proton collider simulation in a ν -two-Higgs-doublet-model (ν -THDM). The heavy charged Higgs bosons are produced in pairs through the electroweak processes and decay to the light sterile neutrinos. The light sterile neutrino further decays into a jet-like object with a muon in it. This helps us discriminate the signal from the backgrounds with the standard model jets.

Primary author: TANG, Yilei

Presenter: TANG, Yilei

Session Classification: Neutrino Physics

Track Classification: Beyond the Standard Model