

Abstract Submitted  
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**What can Electroweak-scale Right-handed Neutrino tell us about the Higgs sector at LHC?** AJINKYA KAMAT, PHAM HUNG, VINH HOANG, Univ of Virginia — In the electroweak scale right handed neutrino ( $EW\nu_R$ ) model, a right handed neutrino can naturally acquire a mass around the electroweak scale. A minimal extension to this model can also accommodate a CP-even Higgs boson with a mass around 126 GeV, in addition to a rich spectrum of BSM scalars and mirror fermions. The 126 GeV Standard Model-like Higgs boson discovered and studied at CMS and ATLAS experiments, exhibits a dual-like nature in the framework of this model. Also, the BSM scalars in this model can potentially be searched for at the LHC.

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