Abstract Submitted
for the APR15 Meeting of
The American Physical Society

Non-sterile electroweak-scale right-handed neutrino and the dual nature of the 126 GeV scalar[1] AJINKYA KAMAT, University of Virginia — In the electroweak scale right handed neutrino (EWνR) 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 Large Hadron Collider.

[1]This work was supported by US DOE grant DE- FG02-97ER41027. The author was supported by the Graduate Fellowship of the Department of Physics, University of Virginia.

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Date submitted: 09 Jan 2015 Electronic form version 1.4