

Daniele Barducci: The effective theory of right-handed neutrinos at collider

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The see-saw model is the minimal framework which is able to explain the observed pattern of neutrino masses and oscillations. Right-handed neutrinos around the GeV scale are an ideal target for high-energy and high-intensity experiments. While intense experimental efforts have deeply tested this hypothesis, there remain the possibility that the origin of the neutrino sector lies in a more involved theory beyond the Standard Model, whose effect at the electroweak scale can be parametrized in terms of effective operators involving Standard Model and right-handed neutrino fields. I will discuss the associated phenomenology and show the prospects for detecting right-handed neutrinos effective interactions at present and future experimental facilities.