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Heavy neutrinos and their Dirac/Majorana nature

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We present the study of processes in current experiments to search for heavy sterile neutrinos, particles which appear as natural extensions of the Standard Model spectrum, whose presence will explain the tiny masses of the known neutrinos. While the simplest explanation of these tiny masses is by a seesaw mechanism where extra neutral leptons have masses way up to GUT scales, there are many versions that imply masses within the reach of current experiments. The Majorana vs. Dirac character of these heavy neutrals, another essential piece of information that helps elucidate the type of seesaw mechanism, is also explored in these studies.

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