

Left-Right symmetry and Keung-Senjanović process at the LHC

Left-Right symmetric models, introduced to explain parity violation of weak interactions, also offer an appealing solution to the problem of neutrino masses by naturally embedding the seesaw mechanism, with the right-handed Majorana neutrinos being a crucial ingredient. Since current experimental searches set a lower limit on the left-right scale in a TeV range, accessible to the colliders such as LHC, there is a possibility to probe the Majorana nature of neutrinos using the so called Keung-Senjanović process, a high-energy analogue to the neutrinoless double beta decay.

Along with the brief description of the minimal Left-Right model and constraints, important features of Keung-Senjanović process and the sensitivity of the LHC inside the light window for right-handed neutrinos will be presented.

Author: POPARA, Goran

Presenter: POPARA, Goran