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What do we learn from HNL collider searches?

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Heavy Neutral Leptons (HNLs), also known as heavy or right-handed neutrinos, are among the best motivated new particles to extend the SM and, when their masses are between the few GeV and few TeV, high-energy colliders are one of our best tools to probe their existence. Nevertheless, most of the experimental searches performed so far only consider simplified scenarios, whose connection to realistic and well-motivated models might not be clear. In this talk, we will review the current LHC and LEP status in searching for HNLs and discuss what are we actually learning from them, including their flavor structure or their nature.

Author: MARCANO, Xabier (UAM-IFT)**Presenter:** MARCANO, Xabier (UAM-IFT)**Session Classification:** Flavour physics: Theory and Experiment**Track Classification:** Flavour physics: Theory and Experiment