Contribution ID: **27**   Type: **not specified**

Analytic formulae for the sensitivity region of DV searches for HNLs at lepton colliders

Tuesday 1 November 2022 14:35 (15 minutes)

We find accurate analytic formulae that can accurately describe the shape of the sensitivity region corresponding to any number of events in a cylindrical detector during the FCC-ee or CEPC Z-pole run. This permits to study analytically how the sensitivity region depends on the various parameters (dimension of the detector, number of Z-bosons and IPs etc), without the need for simulations. The approach can be used when backgrounds are negligible, and when the dependence of the efficiency on position and direction can be neglected.

Author: DREWES, Marco (Universite Catholique de Louvain (UCL) (BE))

Presenter: DREWES, Marco (Universite Catholique de Louvain (UCL) (BE))

Session Classification: LLPs at far-future projects