



Contribution ID: 777

Type: Poster

## Majorana and pseudo-Dirac Neutrinos at the ILC

*Monday, 15 July 2019 18:30 (1h 30m)*

In the extension of the standard model with two right hand neutrinos and considering an approximate lepton number symmetry, we can have these neutrinos with masses in the scale of the GeV and with large mixing. We found that splitting in the masses of the right handed neutrinos could be connected to a lepton number violation (LNV) parameter, and that therefore we will have important contributions from LNV processes. We consider the production of heavy neutrinos in electron-positron colliders, where its displaced vertex can be a golden signal for experimental searches. We analyze a forward-backward asymmetry that will depend on the mass splitting of heavy neutrinos. With this asymmetry, we can put restrictions on the mass difference, and find that they can be much lower than the known limits.

**Primary authors:** Dr JONES PÉREZ, Joel (Pontificia Universidad Católica del Perú); Mr SUAREZ NAVARRO, Omar (Pontificia Universidad Católica del Perú); Dr HERNÁNDEZ, Pilar (Instituto de Física Corpuscular (IFIC), CSIC-Universitat de Valencia,)

**Presenter:** Mr SUAREZ NAVARRO, Omar (Pontificia Universidad Católica del Perú)

**Session Classification:** Wine & Cheese Poster Session

**Track Classification:** Neutrino Physics