## International Workshop on Future Linear Colliders, LCWS2024



Contribution ID: 147

Type: Oral presentation (in person)

## Consistent excesses in SUSY searches at the LHC: Physics case for a Linear Collider

Tuesday, 9 July 2024 09:45 (20 minutes)

Recently ATLAS and CMS published search results in the search for SUSY particle production channel  $pp \to \tilde{\chi}^0_2 \tilde{\chi}^\pm_1$  in three different final states (3l, 2l and mono-jet). All searches in both experiments show consistent (small) excesses for  $m_{\tilde{\chi}^0_2} \approx m_{\tilde{\chi}^\pm_1} \approx m_{\tilde{\chi}^0_1} + 20$  GeV. We discuss these excesses and their implications for an  $e^+e^-$  collider operating at an energy of 500 GeV.

## Apply for poster award

Primary authors: Mr LIKA, Florian; MOORTGAT-PICK, Gudrid; SAHA, Ipsita (Kavli IPMU); Dr CHAKRABORTI,

Manimala; HEINEMEYER, Sven (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

Presenter: HEINEMEYER, Sven (Consejo Superior de Investigaciones Científicas (CSIC) (ES))

Session Classification: BSM, Global Interpretations

Track Classification: Physics and Detector: BSM, Global Interpretations