ICHEP2012



Contribution ID: 419

Type: Parallel Sessions

SUSY prospects for Linear Colliders in view of LHC results

Thursday 5 July 2012 16:30 (15 minutes)

We re-evaluate prospects for Supersymmetry at a future Electron Positron Linear Collider in light of the first 5 fb⁻¹ of data taken at LHC with $\sqrt{s} = 7$ TeV proton proton collisions. Strong new limits from LHC SUSY searches, along with a hint of a Higgs boson signal around $m_h \sim 125$ GeV, suggest a paradigm shift from previously popular models to ones with new and compelling signatures. We present a variety interesting Linear Collider benchmark points in scenarios including: natural SUSY, hidden SUSY, the Kallosh-Linde model, NUHM2 with low m_A , as well as the remaining phase space of mSUGRA/CMSSM. While all proposed benchmark points at present elude LHC limits - and some will at least for a long time - they are compatible with electroweak precision and flavour observables and do offer intriguing case studies for a Linear Collider operating at $\sqrt{s} = 0.25 - 1$ TeV.

Authors: BAER, Howard (University of Oklahoma); Dr LIST, Jenny (DESY (DE))
Presenter: Dr LIST, Jenny (DESY (DE))
Session Classification: TR2 - Plenary 3 - Beyond the Standard Model - SUSY

Track Classification: Track 2 - Beyond the Standard Model - SUSY