ICHEP 2016 Chicago



38th INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS

AUGUST 3 - 10, 2016 CHICAGO

Contribution ID: 864

Type: Oral Presentation

Searches for long lived SUSY particles (10' + 2')

Saturday 6 August 2016 17:47 (12 minutes)

Several supersymmetric models predict massive long-lived supersymmetric particles with lifetimes from fractions of a nanosecond to lifetimes that are effectively stable in the detector. Such particles may be detected through abnormal specific energy loss, disappearing tracks, displaced vertices, long time-of-flight or late calorimetric energy deposits. The talk presents recent results from searches for long-lived supersymmetric particles with the ATLAS detector. The increase in the center-of-mass energy of the proton-proton collisions gives a unique opportunity to extend the sensitivity to production of supersymmetric particles at the Large Hadron Collider. Results will be based on pp collisions at sqrt(s) = 13 TeV.

Presenter: JEANTY, Laura (Lawrence Berkeley National Lab. (US))

Session Classification: Beyond the Standard Model

Track Classification: Beyond the Standard Model