

Search for direct stau production with the ATLAS detector

Thursday, 20 December 2018 14:45 (15 minutes)

Supersymmetry (SUSY) is a promising extension of the SM of particle physics. If the chargino and neutralinos are too heavy to be produced, the direct slepton production will be dominant at LHC. Co-annihilation processes favour a light stau that has a small mass splitting with a bino LSP, which can provide a relic density similar to current dark matter cosmological observations. This talk gives a brief introduction of searching for the direct stau production using 13 TeV 128 fb⁻¹ ATLAS data collected from 2015 to 2018 and the prospect of searching at the high luminosity LHC with the ATLAS Detector.

Type

Parallel talk

Sessions (parallel only)

Beyond Standard Model

Primary author: ZHU, ChenZheng (S)

Presenter: ZHU, ChenZheng (S)

Session Classification: Beyond Standard Model

Track Classification: Beyond Standard Model