



Contribution ID: 213

Type: Poster

Search for gluino-mediated stop pair production in events with b-jets and large missing transverse momentum

A search for supersymmetry involving the pair production of gluinos decaying via stop quarks into the lightest neutralino is reported. The search uses LHC proton-proton collision data at the center-of-mass energy $\sqrt{s}=13$ TeV with an integrated luminosity of 139 inverse fb collected with the ATLAS detector in 2015-2018. The search is performed in events containing large missing transverse momentum and several energetic jets, at least three of which must be identified as originating from b-quarks. The analysis considers two final states, one of which is required to have at least one lepton, while the second search region imposes a veto on leptons. Expected exclusion limit for gluino and neutralino masses is evaluated using simplified signal models.

First author

Lidija Zivkovic

Email

Lidija.Zivkovic@cern.ch

Collaboration / Activity

ATLAS

Primary author: ANTIPOV, Egor (Oklahoma SU)**Presenters:** ANTIPOV, Egor (Oklahoma SU); ANTIPOV, Egor**Session Classification:** T10: Searches for New Physics**Track Classification:** Searches for New Physics