

BOOST 2016: 8th International Workshop on Boosted Object
Phenomenology, Reconstruction and Searches in HEP



Contribution ID: 32

Type: not specified

SUSY searches using boosted techniques at 13 TeV in CMS

Thursday 21 July 2016 09:25 (20 minutes)

Summary

The LHC experiments are pushing limits on production of Supersymmetric (SUSY) particles. SUSY parameter space regions with heavier particles involve “boosted” signatures where two or more decay products are merged and thus difficult to resolve. Therefore, boosted signatures and techniques for reconstructing them are becoming increasingly important in recent years. These topologies allow to recover signal detection efficiency while keeping backgrounds low. Searches for supersymmetric particles with boosted techniques at 13 TeV in CMS are presented in this talk. Analyses using the standard CMS top taggers and re-clustering small-cone size jets into large-cone size jets are both discussed. Plans for the future development are also outlined.

Presenter: LIU, Miaoyuan (Fermi National Accelerator Lab. (US))

Session Classification: Plenary