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Jet techniques in supersymmetry searches in the ATLAS experiment(20'+10')

Thursday 25 July 2019 16:30 (30 minutes)

Many supersymmetric scenarios feature final states with non-standard final state objects. The production of massive sparticles can lead to the production of boosted top quarks or vector bosons, high-pT b-jets. The strongest limits from ATLAS on chargino-neutralino production come from an all-hadronic search for electroweak supersymmetry, one of the first of its kind. At the same time, transitions between nearly mass-degenerate sparticles can challenge the standard reconstruction because of the presence of very soft leptons or jets. The talk will review the application of innovative jet and MET reconstruction techniques to supersymmetry searches in ATLAS.

Presenter: LEBLANC, Matt (University of Arizona (US))

Session Classification: Session