Contribution ID: **54** Type: **not specified**

Search for vector-like top quark partners decaying to an all-jets final state using pp collisions at √s = 13 TeV

Saturday, 1 December 2018 15:20 (15 minutes)

We present a search for the pair production of a vector-like, charge 2/3e quark "T", in the all-hadronic final state. Proton-proton collisions at √s = 13 TeV are analyzed using 35.9 fb−1 of data collected by the CMS detector at the Large Hadron Collider during 2016 collisions. We utilize boosted substructure techniques, including N-subjettiness and soft drop mass to identify vector boson hadronic decays. This search optimizes sensitivity to the T->bW decay, but provides interpretations and limits for all possible decays of the T. The results of this cut-based search are complementary to results of a search utilizing the BEST neural-net tagger.

Session

Works in Progress (15+5 min)

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Session Classification: Works in Progress