



Contribution ID: 10

Type: not specified

Search for vector-like quarks, excited quarks and squarks in boosted final states at CMS

Monday, July 17, 2017 3:30 PM (20 minutes)

We present results of searches for massive top and bottom quark partners using proton-proton collision data collected with the CMS detector at the CERN LHC at a center-of-mass energy of 8 and 13 TeV. These considered models include vector-like quarks, excited quarks and supersymmetric quark partners. These particles can be produced singly or in pair and their decays result in a variety of final states, containing top and bottom quarks, gauge and Higgs bosons. We search using several categories of reconstructed objects, from multi-leptonic to fully hadronic final states. In the latter, substructure techniques are used to identify hadronically decaying top quarks and bosons, to resolve these boosted final states and to increase the sensitivity of the searches. We set exclusion limits on the mass and cross sections of the hypothetical BSM particles

Presenter: GONZALEZ VAZQUEZ, Daniel (Hamburg University (DE))

Session Classification: Searches