

# Phenomenology 2018 Symposium



Contribution ID: 525

Type: parallel talk

## Searches for vector-like quarks at CMS

Monday 7 May 2018 17:00 (15 minutes)

We present results of searches for massive vector-like 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 13 TeV. Single and pair production of vector-like quarks are studied, with decays into a variety of final states, containing top and bottom quarks, electroweak gauge and Higgs bosons. We search using several categories of reconstructed objects, from multi-leptonic to fully hadronic final states. We set exclusion limits on both the vector-like quark mass and cross sections, for combinations of the vector-like quark branching ratios.

### Summary

**Primary authors:** Mr MENDIS, Dalath Rachitha (Kansas State University); COLLABORATION, CMS

**Presenters:** Mr MENDIS, Dalath Rachitha (Kansas State University); MENDIS, Dalath (Kansas State University (US))

**Session Classification:** BSM II