



Contribution ID: 224

Type: **Parallel**

## Searches for vector-like quarks at CMS

*Wednesday 9 July 2025 09:00 (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.

### Secondary track

**Author:** COLLABORATION, CMS**Session Classification:** T09**Track Classification:** T09 - Beyond the Standard Model