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Searches for vector-like quarks at CMS

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We present results of searches for vector-like quarks 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. The presented searches make use of a wide variety of reconstructed objects, allowing to explore diverse signatures from multi-leptonic to fully hadronic. We set exclusion limits on the vector-like quark masses and cross sections, and for combinations of the vector-like quark branching ratios.

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