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## Search for heavy BSM particles coupling to third generation quarks at CMS

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Many models of physics beyond the Standard Model (SM) introduce enhanced couplings to third generation quarks. The predicted signatures at the LHC include single and pair production of vector-like quarks and heavy resonances decaying to third generation quarks. We present results from searches obtained with the full 2016 dataset of proton-proton collisions at 13 TeV. A wide range of final states, from multi-leptonic to entirely hadronic is covered. Jet substructure techniques are employed to identify highly-boosted heavy SM particles in their hadronic decay modes.

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