

Search for TeV top resonances into jets plus muon with the CMS experiment

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Many physics models beyond the Standard Model predict heavy new particles preferentially decaying to top pairs. The first long physics run of LHC is expected to take place at a center-of-mass energy of 10 TeV, and to go on until an integrated luminosity of 200/pb has been collected. We search for resonances in the muon+jets channel of the top pairs mass spectrum for such a scenario. Due to the heavily boosted top quarks from these high-mass resonances, the standard top pair muon+jets selection fails and we present new methods for the selection and reconstruction of those events.

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