DIS 2015
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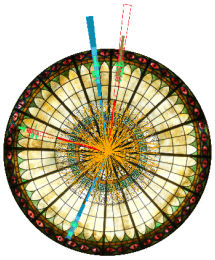

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Search for ttbar resonances and dark matter at CMS

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In many models of physics beyond the Standard Model the coupling of new physics to third generation quarks is enhanced. A search is presented for resonant top quark pair production. The full dataset recorded with the CMS detector in proton-proton collisions at a centre-of-mass energy of 8 TeV is used. The search is performed by measuring the invariant mass distribution of the top-quark pair and testing for deviations from the Standard Model prediction. We also present results from searches for Dark Matter produced in association with top quarks. Signatures investigated include those yielding top quark pairs or a single top quark plus missing transverse energy.

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Session Classification: WG3:Electroweak Physics and Beyond the Standard Model

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