

Top quark physics results from CMS

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Recent results on top quark properties and interactions are presented, obtained using data collected with the CMS experiment during the years 2011 and 2012 at 7 TeV and 8 TeV center-of-mass energy. Measurements are performed for the inclusive and differential top quark pair production cross sections in several top quark final states. The mass of the top quark is extracted using several methods, including indirect constraints from the measured cross section. Cross sections for the electroweak production of single top quarks in both t- and tW-channels are also measured, and limits are set on s-channel production. Further results include measurements of top quark properties, such as the W helicity in top decays, the top pair charge asymmetry, the top quark charge as well as the search for anomalous couplings in both pair and single top-quark production. The results are compared with predictions from the standard model.

Primary author: Dr ANDREA, Jeremy (Institut Pluridisciplinaire Hubert Curien)

Presenter: Dr ANDREA, Jeremy (Institut Pluridisciplinaire Hubert Curien)

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