

# Measurement of t-channel single top quark production in pp collisions

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Measurements are presented of t-channel single top quark production in proton-proton collisions at the LHC at centre-of-mass energies of 7 and 8 TeV, using data collected with the CMS experiment during the years 2011 and 2012. The analyses consider decay channels where the W from the top decays into electron-neutrino or muon-neutrino, and makes use of kinematic characteristics of electroweak single top production for the separation of signal from backgrounds using multivariate methods. The results are compared with the most precise standard model theory predictions. Measurements of top/antitop cross section ratio and of various differential single top quark production cross sections are also presented.

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