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## Top quark mass measurements with CMS

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Measurements of the top quark mass are presented, obtained from CMS data collected in proton proton collisions at the LHC at centre-of-mass energies of 7 TeV and 8 TeV. The mass of the top quark is measured using several methods and channels, including the reconstructed invariant mass distribution of the top quark, an analysis of endpoint spectra as well as measurements from shapes of top quark decay distributions. The dependence of the mass measurement on the kinematic phase space is investigated. The results of the various channels are combined and compared to the world average. The top mass and also  $\alpha_s$  are extracted from the top pair cross section measured at CMS.

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