

Measurement of the top quark mass and the top-antitop invariant mass in pp collisions at 7 TeV with the CMS detector

jeudi 21 juillet 2011 17:00 (30 minutes)

We present measurements of the top quark mass in proton-proton collisions at the LHC at a centre-of-mass energy of 7 TeV using data collected by the CMS experiment during the year 2011. Measurements are presented in all possible final states originating from top-pair production, and the different reconstruction methods to extract the top quark mass are discussed. Particular emphasis will be given to the contribution of systematic uncertainties. The results of the various channels are combined and compared to the world average. The determination of the top-pair invariant mass is also presented, and the result interpreted in the light of possible new physics signatures in the production of top-quark pairs.

Auteur principal: Dr KRAMMER, Manfred (HEPHY)

Orateur: MULDER, Martijn (CERN)

Classification de Session: Top and Electroweak Physics

Classification de thématique: Top and Electroweak Physics