



**HEP 2013
Stockholm
18-24 July 2013**



Contribution ID: 498

Type: **Talk presentation**

Measurement of differential cross sections in top pair production in pp collisions with the CMS detector

Friday, 19 July 2013 09:15 (20 minutes)

Differential top quark pair production cross sections are measured in proton-proton collisions at the LHC at centre-of-mass energies of 7 and 8 TeV, using data collected by the CMS experiment in the years 2011 and 2012. The differential cross sections are measured as functions of various kinematic observables, including the transverse momentum and rapidity of the (anti)top quark and the top-antitop system and the jets and leptons of the event final state. Multiplicity and kinematic distributions of the jets produced in addition to the top pair are investigated. First measurements of the associate production of top quark pairs with vector bosons and with additional b-quarks in the final state are also presented.

Primary author: Dr BORRAS, Kerstin (Deutsches Elektronen-Synchrotron (DE))

Presenter: SYMONDS, Philip Hugh (Brunel University (GB))

Session Classification: Top and Electroweak Physics

Track Classification: Top and Electroweak Physics