



Contribution ID: 13

Type: **not specified**

## Measurement of the differential cross section for top-quark pair production in the dilepton channel at 13 TeV with the CMS detector

In this poster we present measurements of normalized differential top quark pair ( $t\bar{t}$ ) production cross sections using final states with two leptons ( $ee$ ,  $\mu\mu$ , and  $e\mu$ ) in proton-proton collisions at  $\sqrt{s} = 13$  TeV at the CERN LHC. The data were recorded in 2015 with the CMS detector and correspond to an integrated luminosity of  $2.2 \text{ fb}^{-1}$ . The  $t\bar{t}$  production cross section is measured as a function of kinematic properties of the top quarks and the  $t\bar{t}$  system in the full phase space, as well as of the jet multiplicity in the event in the fiducial phase space. Several perturbative QCD calculations are confronted with the data and are found to be broadly in agreement with the measured results.

### Summary

**Author:** SAVITSKYI, Mykola (Deutsches Elektronen-Synchrotron (DE))

**Presenter:** SAVITSKYI, Mykola (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Poster Session & Finger-Food Dinner

**Track Classification:** Poster Session