



Contribution ID: 32

Type: **not specified**

## Measurement of top quark pair differential cross-sections in the dilepton channel in pp collisions at $\sqrt{s} = 7$ and 8 TeV with ATLAS

Measurements of normalized differential crosssections of top quark pair ( $t\bar{t}$ ) production are presented as a function of the mass, the transverse momentum and the rapidity of the  $t\bar{t}$  system in proton-proton collisions at centerofmass energies of  $\sqrt{s} = 7$  TeV and 8 TeV. The dataset corresponds to an integrated luminosity of 4.6 fb1 at 7 TeV and 20.2 fb1 at 8 TeV, recorded with the ATLAS detector at the Large Hadron Collider. Events with top quark pair signatures are selected in the dilepton final state, requiring exactly two charged leptons and at least two jets with at least one of the jets identified as likely to contain a bhadron. The measured distributions are corrected for detector effects and selection efficiency to crosssections at the parton level. The differential crosssections are compared with different Monte Carlo generators and theoretical calculations of  $t\bar{t}$  production. The results are consistent with the majority of predictions in a wide kinematic range.

### Summary

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

**Track Classification:** Poster Session