

# Top quark pair production cross section at LHC in ATLAS

*Tuesday, 26 August 2014 14:00 (20 minutes)*

Measurements of the top quark production cross sections in proton-proton collisions with the ATLAS detector at the Large Hadron Collider are presented. The measurement require no, one or two electrons or muons in the final state (single lepton, dilepton, hadronic channel). In addition, the decay modes with tau leptons are tested (channels with tau leptons). The main focus are measurements of differential spectra of  $t\bar{t}$  final states, in particular, measurements that are able to constrain the modelling of additional parton radiation like the jet multiplicity distribution.

**Primary author:** ARGYROPOULOS, Spyridon (DESY)

**Presenter:** ARGYROPOULOS, Spyridon (DESY)

**Session Classification:** Standard model physics at the TeV scale

**Track Classification:** 6) Standard model physics at the TeV scale