

# Measurements of $t\bar{t}$ differential cross-sections in the all-hadronic channel

*Friday, 19 January 2018 16:45 (30 minutes)*

Currently large  $t\bar{t}$  production at the LHC allows detail study of the top quark,  $t\bar{t}$  quark pairs. The talk will introduce the results of the analysis interested with the measurement of differential cross-section of high boosted  $t$  quark and  $t\bar{t}$  pairs as a function of various kinematic observables. Study is performed on the full datasets collected by the ATLAS detector at  $\sqrt{s} = 13$  TeV and  $pp$  collisions in 2015 and 2016. The integrated luminosity of considered datasets reached up  $36.1 \text{ fb}^{-1}$ . The studied spectra were corrected for detector effects and devolved to particle and parton fiducial phase space. The comparison is done with several type of theoretical predictions primarily with Powheg+Pythia8 Monte-Carlo generator. Such study provides a unique opportunity to test of Standard Model at the TeV scale.

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**Session Classification:** ATLAS physics