



Contribution ID: 61

Type: **Short Talk (5')**

Z' to $t\bar{t}$ in the single lepton-final state with Atlas Open Data

Friday 4 December 2020 15:10 (5 minutes)

Different models of physics Beyond the Standard Model (BSM) predict different kinds of Z' bosons, motivating the search for these particles at the Large Hadron Collider (LHC). In this work, a $Z' \rightarrow t\bar{t}$ analysis in the semileptonic top quark pair channel is presented, using the ATLAS Open Data Dataset at a centre-of-mass energy of 13TeV and corresponding to an integrated luminosity of 10fb^{-1} . An event selection criteria is implemented, where acceptable agreement between the data and Monte Carlo simulated predictions is observed.

Authors: GOMEZ CRUZ, Nicolas; ORDONEZ, Sebastian (National University of Colombia)

Co-author: SANDOVAL USME, Carlos (Universidad Nacional de Colombia)

Presenters: GOMEZ CRUZ, Nicolas; ORDONEZ, Sebastian (National University of Colombia)

Session Classification: Common Session