Contribution ID: **543** Type: **Parallel session talk**

tt+X measurements using the full run 2 dataset with the ATLAS experiments

Thursday 18 July 2024 17:03 (18 minutes)

The high center-of-mass energy of proton-proton collisions and the large available datasets at the CERN Large Hadron Collider allow to study rare processes of the Standard Model with unprecedented precision. Measurements of rare SM processes provide new tests of the SM predictions with the potential to unveil discrepancies with the SM predictions or provide important input for the improvement of theoretical calculations. In this contribution, total and differential measurements of top-quark production in association with a photon, Z or W boson are shown using data taken with the ATLAS experiment at a center-of-mass-energy of 13 TeV. These measurements provide important bounds on the electroweak couplings of the top quark and constrain backgrounds that are important in searches for Higgs production and for new phenomena beyond the SM.

Alternate track

I read the instructions above

Yes

Authors: DELIOT, Frederic (Université Paris-Saclay (FR)); HAHN, Jan (Universitaet Siegen); HAHN, Jan Joachim (Universitaet Siegen (DE))

Presenter: HAHN, Jan Joachim (Universitaet Siegen (DE))

Session Classification: Top Quark and Electroweak Physics

Track Classification: 04. Top Quark and Electroweak Physics