



Contribution ID: 232

Type: Parallel talk

Measurements of $t\bar{t}$ pairs produced in association with electroweak gauge bosons using the ATLAS detector

Friday, 12 July 2019 09:30 (15 minutes)

The large centre-of-mass energy available at the proton-proton collider LHC allows for the copious production of top-quark-antiquark pairs in association with electroweak gauge bosons ($W/Z/\gamma$) at high transverse momenta. The $t\bar{t}Z$ and $t\bar{t}W$ production cross sections are simultaneously measured using a combined fit in several analysis regions. The measurement of the $t\bar{t}Z$ cross section is used to set constraints on effective field theory operators which modify the $t\bar{t}Z$ vertex. The $t\bar{t}\gamma$ measurements are performed in single-lepton and dilepton final states in a fiducial volume. The differential cross-sections are measured as a function of several photon kinematic variables.

Primary author: JUSTE ROZAS, Aurelio (ICREA and IFAE (ES))

Presenter: LOPEZ SOLIS, Alvaro (University of Sheffield (GB))

Session Classification: Top and Electroweak Physics

Track Classification: Top and Electroweak Physics