



Contribution ID: 154

Type: **parallel talk**

ATLAS measurements of vector boson production

Tuesday 10 May 2016 15:30 (15 minutes)

Vector boson production in pp collisions at 7, 8 and 13 TeV has been extensively studied by ATLAS. Recent results include the precision measurements of the transverse momentum of the Z/γ^* boson production, sensitive to soft resummation effects, hard jet emissions and electroweak corrections. A precise measurement of the angular coefficients of the Zboson production tests the underlying QCD dynamics of the DrellYan process. A first measurement of the inclusive W and Z cross section at a cms energy of 13TeV has been derived.

The Production of jets in association with a vector boson is an important process to study QCD in a multiscale environment. Cross sections, differential in several kinematics variables, have been measured with the ATLAS detector and compared to stateoftheart QCD calculations and Monte Carlo simulations. First measurements of vector boson + jets production have been performed at cms energies of 13TeV. An overview of these results is given.

Summary

Author: DEBENEDETTI, Chiara (University of California,Santa Cruz (US))

Presenter: DEBENEDETTI, Chiara (University of California,Santa Cruz (US))

Session Classification: QCD & Electroweak