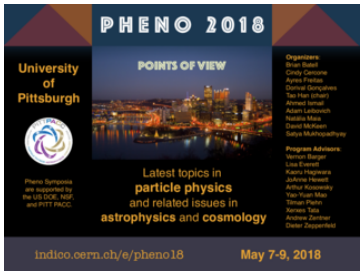

Contribution ID: **608** Type: **parallel talk**

Tests of the Standard Model with Multi boson final states at the ATLAS Detector

Tuesday 8 May 2018 16:45 (15 minutes)

Measurements of the cross sections of the production of two and three electroweak gauge bosons at the LHC constitute stringent tests of the electroweak sector of the Standard Model and provide a model-independent means to search for new physics at the TeV scale. The ATLAS collaboration has performed measurements of integrated and differential cross sections of the production of heavy di-boson pairs at centre-of-mass energies of 13 TeV. We present in particular measurements of WW, WZ and ZZ cross sections in leptonic decays. In addition, the ATLAS collaboration has searched for the production of three W bosons or of a W boson and a photon together with a Z or W boson at a center of mass energy of 8 TeV. Moreover, results on electroweak production in vector boson scattering of two W bosons of same-sign at center of mass energy of 8 TeV are presented. Results are compared to state-of-the art theory predictions and interpreted in the framework of anomalous gauge couplings.

Summary

Author: GONELLA, Giulia (Albert Ludwigs Universitaet Freiburg (DE))

Presenter: GONELLA, Giulia (Albert Ludwigs Universitaet Freiburg (DE))

Session Classification: QCD & EW II