



Contribution ID: 217

Type: not specified

Search for a Standard Model Higgs boson produced in association with a vector boson and decaying to a pair of b-quarks in pp collisions at 13 TeV using the ATLAS detector

Tuesday 16 May 2017 15:40 (20 minutes)

A search for the decay of the Standard Model Higgs boson into a bb pair when produced in association with a W or Z boson has been performed with the ATLAS detector. Data were collected in proton-proton collisions from Run 2 of the Large Hadron Collider at a centre-of-mass energy of 13 TeV, final states are considered that contain 0, 1 and 2 charged leptons (electrons or muons), targeting the decays: $Z \rightarrow \nu\nu$, $W \rightarrow l\nu$, and $Z \rightarrow ll$. In the 1 lepton(WH) channel, the multijet background contributes a significant fraction of the background events, the optimization of the selections for multijet rejection has been studied, and data driven approaches are used to estimate it due to difficulties encountered to model this background.

Summary

Author: MA, Yanhui (Shandong University (CN))

Presenter: MA, Yanhui (Shandong University (CN))

Session Classification: Posters