2019 Meeting of the Division of Particles & Fields of the American Physical Society



Contribution ID: 144 Type: Oral Presentation

Study of VBS ZZ production associating two jets with the ATLAS experiment

Thursday, 1 August 2019 17:12 (24 minutes)

The study of vector boson scattering (VBS) in ZZjj events produced in proton-proton collisions with a center of mass energy of 13 TeV will be reported. Data used in analysis were collected by the ATLAS experiment during Run II and correspond to a total integrated luminosity of 139 fb $^{-1}$. Final states with four-charged lepton (4l) or two-charged lepton plus two neutrinos (2l2 ν) from the ZZ decays produced in association with two forward/backward jets are used to extract the VBS ZZjj signal. The measurement of the inclusive ZZjj production cross section will be reported. The measurement of the Electroweak VBS ZZ signal strength will be presented as well.

Primary author: ZHANG, Shuzhou (University of Michigan (US))

Presenter: ZHANG, Shuzhou (University of Michigan (US)) **Session Classification:** Higgs & Electroweak Physics

Track Classification: Higgs & Electroweak Physics