

Measurement of CP properties of the Higgs boson coupling to weak bosons using diphoton and four lepton decays at the ATLAS experiment

Thursday, November 10, 2022 2:15 PM (15 minutes)

The CP properties of the Higgs boson couplings to weak bosons can be probed in production by exploiting the Vector Boson Fusion process, or by studying the properties of the Higgs decay to two Z bosons. This talk presents the measurement of the CP properties to weak bosons by the ATLAS experiment using Higgs to two photon decays in VBF production, or Higgs to four leptons decays, and the full Run 2 dataset of pp collisions collected at 13 TeV at the LHC. The results are provided in the framework of Effective Field Theories.

Type of talk

Experimental measurements

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Session Classification: Thursday Session A

Track Classification: Physics Topics: Effective Field Theory