Contribution ID: **132** Type: **Poster**

Constraints on the Higgs boson self-coupling from the combination of single-Higgs and double-Higgs production analyses performed with the ATLAS experiment

Friday 31 July 2020 13:36 (3 minutes)

Constraints on the Higgs boson self-coupling are set by combining the single Higgs boson analyses targeting the γγ, ZZ, *WW*, tau+tau- and bb decay channels and the double Higgs boson analyses in the bbbb, bbtau+tau- and bbγγ decay channels, using data collected at sqrt(s)=13 TeV with the ATLAS detector at the LHC. With the assumption that new physics affects only the Higgs boson self-coupling (λ_HHH), the measured values for λ_HHH will be discussed. Results with less stringent assumptions are also provided, introducing additional coupling modifiers for the Higgs boson interactions with the other Standard Model particles.

I read the instructions

Secondary track (number)

Primary author: RAN, Kunlin (Chinese Academy of Sciences (CN))

Presenter: RAN, Kunlin (Chinese Academy of Sciences (CN))

Session Classification: Higgs Physics - Posters

Track Classification: 01. Higgs Physics