



Contribution ID: 659

Type: **Parallel Talk**

Combined Higgs boson measurements at the ATLAS experiment

Thursday, 7 July 2022 12:15 (15 minutes)

With the full Run 2 pp collision dataset collected at 13 TeV, very detailed measurements of Higgs boson coupling properties can be performed using a variety of final states, identifying several production modes and its decays into bosons and fermions and probing different regions of the phase space with increasing precision. These measurements can then be combined to exploit the strengths of each channel, thus proving the most stringent global measurement of the Higgs coupling properties. This talk presents the latest combination of Higgs boson coupling measurements by the ATLAS experiment, discussing results in term of production modes, branching fractions and Simplified Template Cross Sections, as well as their interpretations in the framework of kappa modifiers to the strength of the various coupling and decay properties.

In-person participation

Yes

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