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Type: **Parallel Talk**

Measurements of the Higgs boson couplings and their interpretations in bosonic final states at the ATLAS experiment

Thursday, 7 July 2022 09:00 (15 minutes)

Very detailed measurements of Higgs boson properties and its interactions can be performed with the full Run 2 pp collision dataset collected at 13 TeV by using its decays into bosons, shining light over the electroweak symmetry breaking mechanism. This talk presents the latest measurements of the Higgs boson coupling properties by the ATLAS experiment in various bosonic decay channels, e. Results on production mode cross sections, Simplified Template Cross Sections, and their interpretations are presented. Specific scenarios of physics beyond the Standard Model are tested, as well as a generic extension in the framework of the Standard Model Effective Field Theory.

In-person participation

Yes

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