

# Measurements of Higgs boson production with top quarks with the ATLAS detector

*Wednesday 6 November 2024 12:10 (20 minutes)*

The study of Higgs boson production in association with one or two top quarks provides a key window into the properties of the two heaviest fundamental particles in the Standard Model, and in particular into their couplings. This talk presents property measurement of Higgs boson, in particular cross section and CP nature, with tH and ttH production in pp collisions collected at 13 TeV with the ATLAS detector using the full Run 2 dataset of the LHC.

## Primary track

Precision Higgs measurements and calculations

## Is the speaker a PhD student or post-doc?

No

**Presenter:** BRAHIMI, Nihal (CNRS/IN2P3 LAPP)

**Session Classification:** Precision Higgs measurements and calculations 4 - sal IV

**Track Classification:** Precision Higgs measurements and calculations