

# DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 29

Type: **Parallel talk**

## Measurements of the Higgs boson coupling properties to fermions with the ATLAS detector

*Tuesday 28 March 2023 11:10 (20 minutes)*

Testing the Yukawa couplings of the Higgs boson to quarks and leptons is important to understand the origin of fermion masses. The talk presents several measurements in Higgs boson decays to two bottom quarks or two tau leptons, searches for Higgs boson decays to two charm quarks or two muons, as well as direct constraints of the charm-Yukawa coupling. The production of Higgs bosons in association with top quarks will also be discussed. These analyses are based on pp collision data collected at 13 TeV.

### Submitted on behalf of a Collaboration?

Yes

### Participate in poster competition?

No

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**Session Classification:** WG3

**Track Classification:** WG3: Electroweak Physics and Beyond the Standard Model