

# Measurements of the Higgs boson mass and width at CMS

*Tuesday 5 November 2024 09:00 (20 minutes)*

An important aspect of the Higgs boson physics programme at the LHC is to determine all the properties of this particle, including its mass, which is a free parameter in the SM, and its width. This presentation will discuss the latest developments in measurements of the Higgs boson mass and width, with data collected by the CMS experiment at a centre of mass energy of 13 TeV. Both direct and indirect constraints on the Higgs boson width will be shown.

## Primary track

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

No

**Presenter:** GARGIULO, Ruben (Sapienza Universita e INFN, Roma I (IT))

**Session Classification:** Precision Higgs measurements and calculations 1 - sal IV

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