

# Constraints on anomalous Higgs boson couplings and EFT with the CMS experiment

*Tuesday, November 8, 2022 9:40 AM (15 minutes)*

We present the most recent searches for CP and anomalous couplings (AC) in Higgs boson production and decay. Couplings of the Higgs boson to both vector bosons and fermions will be discussed in various production channels and final states. The results have been performed with data from the full CMS Run 2 dataset, corresponding to an integrated luminosity of  $138 \text{ fb}^{-1}$  at a center-of-mass energy of 13 TeV. They significantly improve upon previous constraints. Results in the context of effective field theories (EFT) will also be presented.

## Type of talk

Experimental measurements

**Presenter:** URDA, Lourdes (CIEMAT (Madrid))

**Session Classification:** Tuesday Session B

**Track Classification:** Physics Topics: Effective Field Theory