

# EFT interpretations in the Higgs sector at CMS

*Saturday 20 July 2024 08:30 (17 minutes)*

Effective Field Theories provide an interesting way to parameterize indirect BSM physics, when its characteristic scale is larger than the one directly accessible at the LHC, for a large class of models. Even if the Higgs boson is SM-like, BSM effects can manifest itself through higher-dimension effective interactions between SM fields, providing indirect sensitivity through distortions of kinematic distributions. Constraints on such effects derived by measurements of several production and decay modes of the Higgs boson and their combination on the data set collected by the CMS experiment a centre of mass energy of 13 TeV will be presented.

## Alternate track

### I read the instructions above

Yes

**Primary authors:** CMS; DUTTA, Irene (Fermi National Accelerator Lab. (US))

**Presenter:** DUTTA, Irene (Fermi National Accelerator Lab. (US))

**Session Classification:** Higgs Physics

**Track Classification:** 01. Higgs Physics