

# Modeling BSM effects on the Higgs transverse-momentum spectrum in an EFT approach

*Tuesday 29 August 2017 14:30 (30 minutes)*

After the Higgs boson discovery, LHC can be used as a precision machine to explore its properties. Indeed, in case new resonances will not be found, the only access to New Physics would be via measuring small deviations from the SM predictions. A consistent approach is provided by a bottom-up Effective Field Theory, with dimension six operators built of Standard Model fields (SMEFT). We discuss how this approach works in case of the transverse momentum spectrum of the Higgs particle. In our calculation we augmented the Standard Model with three additional operators describing modifications of the top and bottom Yukawa couplings, and a point-like Higgs coupling to gluons. We discuss also the impact of the chromomagnetic operator.

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**Session Classification:** Higgs physics and searches