

Exploring the Higgs sector via Higgs boson pair production

Tuesday 10 September 2019 17:30 (25 minutes)

We show how anomalous trilinear Higgs boson couplings, as well as other anomalous couplings in the Higgs sector, impact the shapes of distributions in Higgs boson pair production. In particular we discuss the interplay between higher order QCD corrections and effects from physics beyond the Standard Model, parametrized by Effective Field Theory. We present new methods, partly based on machine learning, to extract information about the underlying BSM parameter space from di-Higgs observables.

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