

Higgs boson offshell measurements probe non-linearity

Thursday 13 June 2024 17:25 (15 minutes)

The measurements of off-shell Higgs boson contributions in massive gauge boson pair production are known to probe its electroweak interactions across different energy scales. These are often employed as an estimator of the Higgs boson width in restricted theories of beyond the Standard Model physics. In this talk, I will revisit this measurement in the context of the Higgs Effective Field Theory (HEFT) framework and re-advertise its potential to probe the Higgs boson non-linearity. The relevant non-linear HEFT interactions are constrained by correlating the off-shell with the on-shell measurements. Thus, this so-called off-shell measurement complements related analyses of multi-Higgs final states.

Primary author: Dr ., Anisha (University of Glasgow)

Presenter: Dr ., Anisha (University of Glasgow)

Session Classification: Session