

## Interpreting HEP data in SMEFiT

*Thursday, 31 August 2023 10:30 (20 minutes)*

Global fits to particle physics data outside experimental collaborations requires the combination and (re)interpretation of a vast range of LHC datasets. This is a non trivial exercise and requires state of the art Monte Carlo simulations at NLO QCD in the Standard Model Effective Field Theory (SMEFT). In this talk, I will present the latest ongoing efforts from the SMEFiT collaboration, focusing especially on the combined top, Higgs, diboson and EW sectors. I will also show results related to explicit UV complete models via matching. Throughout the talk, I will highlight several aspects that are relevant to the interplay between theory and experiment in the context of global EFT fits.

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