Contribution ID: **154** Type: **not specified**

The role of dimension-8 operators in an EFT for the 2HDM

Tuesday 9 May 2023 16:30 (15 minutes)

The Standard Model effective field theory (SMEFT) is a standard tool for parametrizing the effects of new physics. The ordiinary approach to SMEFT is to use the truncation at dimension-6, which would typically be the leading contribution beyond the Standard Model. We perform the matching to dimension-8 in the two-Higgs-doublet model (2HDM) and critically examine the dimension-6 and dimension-8 truncations. We find that the dimension-6 truncation fails to capture important physics contributions in the 2HDM.

Author: Dr SULLIVAN, Matthew (Brookhaven National Laboratory)

Presenter: Dr SULLIVAN, Matthew (Brookhaven National Laboratory)

Session Classification: BSM XI

Track Classification: BSM