SUSY24: The 31st International Conference on Supersymmetry and Unification of Fundamental Interactions



Contribution ID: 206 Type: Parallel Talk

Mapping the SMEFT one-loop structure of linear Standard Model extensions

Tuesday 11 June 2024 16:25 (20 minutes)

This talk will present a one-loop UV/IR dictionary providing a mapping between the B-conserving dimension-6 SMEFT and the linear SM extensions. These are exotic multiplets that couple linearly to the SM through renormalisable interactions. Our work leverages recent progress in computational tools which automate the one-loop matching procedure. The utility of our map in assessing the implications of dimension-6 operator measurements on simplified models and vice versa is illustrated with an example model interpretation of a fit to electroweak precision data.

Presenter: GARGALIONIS, John (IFIC and the University of Valencia,)

Session Classification: Flavour physics and neutrinos