

MW in the SMEFT (30' talk + 30' discussion)

Wednesday 19 April 2023 14:00 (1 hour)

I will discuss the interpretation of the recent CDF W mass measurement as part of a global analysis in the SMEFT framework at linear, dimension-6 level. Combining data from EW precision observables, Higgs signal strengths and diboson production allows for the identification of the preferred regions of parameter space in light of this measurement. I will also discuss how one can use the SMEFT results to determine which single-field extensions of the SM are able to account for the deviation. Finally I will comment on the impact of dimension-8 effects in a model with a hyper charge-zero electroweak triplet scalar in relation to the W-mass anomaly.

Presenter: MIMASU, Ken (King's College London)