

Optimal determination of differential rates in the presence of higher-dimensional operators

Tuesday 13 December 2016 16:00 (15 minutes)

When the SM is interpreted as the renormalizable sector of an EFT, the effects of new physics are encoded into a set of higher-dimensional operators. These operators potentially deform the shapes of SM differential distributions of final states observable at the LHC. We describe a method to obtain optimal estimations of these deformations when using numerical tools, like MC simulations. We exemplify our method by computing the deformations induced by the operator in WW production at the LHC, and by deriving a bound on O_{3W} using 8 TeV CMS data.

Presenter: Dr TONERO, Alberto (ICTP-SAIFR São Paulo)

Session Classification: Interpretation studies