EFT: Confrontation with data and BSM interpretations

1. What are the deficiencies/limitations of the EFT fits done so far? Incidentally, it would be good to have ways to compare existing results
   - c.f. Gauthier and Ilaria: comparison of simulation codes and theoretical uncertainties (LO vs NLO, scheme, EFT truncation, cuts on √š…)
   - EFT validity. Remember that different treatments have different BSM interpretations
   - Impact of experimental systematics
   - Keep the correlations
   - Identify relevant channels/observables
2. What do experimentalists need from theorists and vice-versa?
   - Should there be an intermediate layer, like STXS, between the experimental inputs and the EFT interpretations?
   - How to include differential informations? Bin-to-bin correlations?
3. How to go beyond fits performed so far?
   - Relax flavour hypotheses and constructing (more) observables directly sensitive to CP-odd interactions
   - Introduce an additional free parameter related to exotic decay?
   - Think of better observables (e.g. optimised observables)
   - Go more global (EW/diboson/top/Higgs…)
   - Take into account tails of distribution (BSM effects growing with energy)
   - EFT in backgrounds?
   - How to take into account theoretical constraints (unitarity, positivity…)
4. What are the lessons/implications for BSM?
   - Identify physical hypotheses to test
   - Compare different constraints (flavour, low energy…)