



# Reshaping effective field theory analyses: new challenges at the LHC and new tools for one-loop matching

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The lack of new physics discoveries has not only motivated increasing use of effective field theory (EFT) techniques to connect beyond Standard Model ideas and experiment, but also pushed us to think harder about how to interpret data and perform calculations within the EFT framework. As a result, progress has been made in at least two aspects: limitations and inconsistencies of conventional EFT fits have been recognized, and new knowledge of quantum field theory has been gained. I will discuss one example of each aspect, namely how LHC data are challenging the use of triple gauge coupling parameterization, and how matching from a full theory to an EFT can be done without Feynman diagrams.