

Staying on Top of likelihood analyses: Using pyhf in the context of global SMEFT analyses with SFitter

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The SFitter analysis framework has been used for many global analyses, making use of a comprehensive treatment of uncertainties and their correlations to provide constraints on the Standard Model Effective Field Theory (SMEFT). Due to the nature of global analyses, this requires the implementation of a large number of different experimental measurements. The publication of likelihoods by the experimental collaborations, along with the use of pyhf, now allows for a new approach to the implementation of this data into SFitter. I will give an overview of the SFitter framework, highlighting in particular how it takes uncertainties and correlations between measurements into account and demonstrating the use of pyhf for the implementation of likelihoods in this context.

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