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EFT Lagrangian Morphing

Wednesday 30 March 2022 17:00 (45 minutes)

In this lecture I will discuss a method of morphing distributions that is useful to measure the parameters of an Effective Field Theory (EFT). I will introduce EFT which is a powerful theoretical framework that is used to systematically extend known physics lagrangians. I will then talk about the idea behind the morphing between distributions given the predictions at some point in the parameter space which allow to obtain a continuous prediction in terms of EFT parameters. I will finally show a couple of examples of the implementation of this technique as the RooLagrangianMorphFunc class within RooFit toolkit that is available with the ROOT software.

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Session Classification: Modeling of data 2