The 29th International Workshop on Weak Interactions and Neutrinos



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EFT analysis of Neutrino Experiments (remote)

Friday, 7 July 2023 17:00 (25 minutes)

I will discuss how to analyse neutrino experiments using an Effective Field Theory (EFT) framework. This approach makes possible to include generic non-standard effects in neutrino production and detection, and to study the interplay with non-neutrino experiments. We will discuss the connection with the traditional non-standard interactions (NSI) approach, and the application to specific experiments such as Daya Bay and COHERENT in the context of the SM-EFT. This will show that these experiments should be included in electroweak precision studies from now on. Work based on JHEP 05 (2023) 074, JHEP 10 (2021) 086, JHEP 11 (2020) 048 and JHEP 05 (2019) 173.

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