



## SPEAKER: Sophie Renner

## TITLE: The flavour phenomenology of ALP EFTs

DATE: 28 May 2021, 14:30

PLACE:

## ABSTRACT

Abstract: Axion-like particles (ALPs) are a generic and well-motivated class of BSM particles, which have a rich phenomenology. I will discuss the effective field theory of a general axion-like particle in the MeV to GeV mass range, focussing mainly on its flavour changing effects. Starting from the UV scale, I'll describe its running and matching through the electroweak scale and down to the scale of flavour measurements. I'll describe a calculation of ALP effects in kaon decays within the framework of chiral perturbation theory, and discuss other flavour constraints in this mass range, expressed in terms of the fundamental ALP couplings at the UV scale. Zoom link: https://unipd.zoom.us/j/81195975077

Organized by Ramona Gröber