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Tackling ALP searches in meson decays with ALPaca: a phenomenological approach

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Part of the community has intensively searched for ALP signals, as well as conducted dedicated data analyses to identify potential evidence of New Physics compatible with an ALP, resulting in constraints on the ALP parameter space. Therefore, it is now the time to present a tool, ALPaca, that facilitates the combination among the different information on ALP physics.

The focus of this talk will be on a phenomenological analysis of the ALP theory using the most up-to-date data from flavour facilities, to show both the latest constraints and the potential of ALPaca.

Primary authors: ALDA, Jorge (Università di Padova/INFN); MERLO, Luca (Universidad Autónoma de Madrid); FUENTES ZAMORO, Marta (Universidad Autónoma de Madrid); RIGOLIN, Stefano; Dr PONCE DÍAZ, Xavier (University of Basel)

Presenter: FUENTES ZAMORO, Marta (Universidad Autónoma de Madrid)

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