

Probing axion-like particles with reactor neutrino experiments

Thursday 9 September 2021 14:38 (18 minutes)

The current and next generation experiments looking for coherent elastic neutrino-nucleus scattering (CEvNS) and neutrino-electron scattering are a unique tool for exploring exotic neutrino physics via nuclear and electron recoil measurements. In this talk, I will discuss the potential of such experiments in opening new directions on rare event searches beyond the neutrino sector. In particular, I will present the projected sensitivities of reactor neutrino experiments regarding axion-like particle (ALP) searches with a special focus on the ALP-photon, ALP-electron and ALP-nucleon couplings.

Working group

WG2

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