Contribution ID: 58 Type: not specified

Axion-Like Particles in Radiative Quarkonia Decays

Thursday, 4 July 2024 10:30 (5 minutes)

Radiative quarkonia decays offer an ideal setup for probing Axion-Like Particle (ALP) interactions. In this talk, we will present the results of our recent analysis of this type of processes including an updated set of new experimental searches. This analysis consists of a comprehensive study of the production channels in the process $e^+e^- \to a\,\gamma$ in B- and Charm-factories, as well as all the different possible decay channels of the ALP. Several benchmarks are used such that the bounds obtained can be understood in terms of fewer parameters of the theory and highlight features of different UV completions.

Title of the Poster/Talk

Axion-Like Particles in Radiative Quarkonia Decays

Related Papers/Preprints

https://arxiv.org/abs/2402.12454

Primary author: PONCE DIAZ, Xavier (Istituto Nazionale di Fisica Nucleare)

Presenter: PONCE DIAZ, Xavier (Istituto Nazionale di Fisica Nucleare)

Session Classification: Young Scientist Forum