

## Running in the ALPs

*Thursday, 15 April 2021 23:48 (11 minutes)*

In this talk I will present the complete anomalous dimension matrix at 1 loop of the Standard Model effective field theory extended with an axion-like particle (ALP) up to dimension 5. The ALP couplings are probed by different experiments across a huge range of energy scales and as such, a consistent analysis of the corresponding constraints requires the use of the renormalization group equations. The results are presented above and below the electroweak scale, assuming only that new physics does not violate CP. I will also discuss the different bases used in the literature and their relations with shift-symmetry.

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**Session Classification:** 4.15 night