

Theoretical framework for Dark Matter Axions

Tuesday, 9 July 2024 09:30 (30 minutes)

The QCD axion offers a compelling solution to the strong CP problem and a well-motivated dark matter candidate, inspiring several ultra-sensitive experiments probing light and weakly-coupled dark sectors. After reviewing the theoretical framework for dark matter axions, I will focus on recent developments in axion model building suggesting that the QCD axion parameter space is much larger than what traditionally thought. Implications for present and future axion detection experiments will be discussed as well.

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