

The QCD Axion: Some Like It Hot

Friday, 2 February 2024 11:45 (35 minutes)

The QCD axion is a compelling target for physics beyond the Standard Model which offers also a characteristic imprint in the Early Universe as a hot relic. In this talk we present a state-of-the-art bound on the QCD axion from Cosmology by confronting momentum-dependent Boltzmann equations against up-to-date measurements of the CMB –including ground-based telescopes –and abundances from BBN. We conclude presenting forecasts using dedicated likelihoods for future cosmological surveys and recent non-perturbative computations at the crossover from lattice QCD.

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