

Phenomenology 2020 Symposium



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Type: **Parallel Talk**

QCD Axion Dark Matter from a Late Time Phase Transition

Tuesday 5 May 2020 18:00 (15 minutes)

I will discuss a production scenario for QCD axion dark matter where the Peccei-Quinn phase transition occurs at a temperature far below the symmetry breaking scale. Both early cosmic string network dynamics and parametric resonance contribute to the axion population. The observed dark matter abundance is reproduced even if the decay constant is much lower than 10^{11} GeV. I will also discuss the rich phenomenology of this scenario as it pertains to future observations of 21 cm lines and rare Kaon decays.

Summary

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