



Contribution ID: 24

Type: **Talk**

Gravitational Waves from Fundamental Axion Dynamics

Thursday 10 September 2020 16:55 (25 minutes)

In this talk I will present a fundamental theory of the QCD axion: all couplings flow to zero in the infinite energy limit (realizing the totally asymptotically free scenario) and the Peccei-Quinn (PQ) scale f_a is dynamically generated by quantum effects. This theory is highly predictive as the axion sector only features few free parameters: f_a and the QCD gauge coupling. The PQ phase transition is strongly first order and I will discuss how to test this theory through gravitational wave detectors such as LIGO and the Einstein telescope.

Is this abstract from experiment?

No

Is the speaker for that presentation defined?

Yes

Name of experiment and experimental site

N/A

Internet talk

Yes

Details

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Session Classification: Workshop on New physics paradigms after Higgs and gravitational wave discoveries