



Contribution ID: 139

Type: **Parallel talks**

CMB birefringence from axion strings

Monday 17 July 2023 17:00 (20 minutes)

A cosmological network of axion strings in our Universe today may leave its imprint on the polarization pattern of the cosmic microwave background radiation through the phenomenon of axion-string-induced birefringence. I will explain how this signal arises, discuss how it depends on the properties of the string network and the axion-photon coupling, describe how existing measurements of anisotropic birefringence place constraints on axion strings, and discuss how the non-Gaussian nature of this signal could be leveraged in searches with future data.

Author: LONG, Andrew (Rice University)

Presenter: LONG, Andrew (Rice University)

Session Classification: Particle cosmology: Theory and Experiment

Track Classification: Particle cosmology: Theory and Experiment