

# Kaleidoscope of axion models and probes

*Saturday 4 December 2021 14:00 (45 minutes)*

Axions, periodic pseudo-scalars, enjoy a wide range of phenomenological applications, from solving the strong CP problem to providing DM and inflaton candidates. Justifiably, they have been the subject of prolonged theoretical interest, which has intensified over the past few years. In this talk, I will discuss several fun developments in axion models and probes, including: a recently identified source of axion potential, novel astrophysical probes such as axion echos from supernova remnants and cosmic distance measurements, and new cosmological models of QCD axion dark matter.

**Presenter:** FAN, Jiji (Brown University)