

## COLLOQUIUM

# Revealing Structure in the Axiverse

**speaker** LIAM MCALLISTER (Cornell University, USA)



**Abstract** I will describe progress in understanding the axions that arise in string theory. Advances in computational geometry have allowed us to construct, for the first time, theories of hundreds of axions in explicit compactifications of string theory. We find patterns therein that differ strongly from what one finds in the literature that extrapolates from simple geometries supporting small numbers of axions. I will discuss implications for the

strong CP problem, black hole superradiance, and axion-photon couplings.

**29**

**March 2023**

**3.30 pm (CET)**

Zoom link: <https://us06web.zoom.us/j/84970352620?pwd=MkFqT0Rvb1c3ZU1rOUFBWIM4bmxiUT09>