Date:	Monday, 26 November 2018
Time:	15:00 - 16:20
Speaker:	Francesca DAY
Institution:	University of Cambridge

Title:

Astrophysical searches for axions

Abstract:

Axions and axion-like particles may be produced in abundance in a wide range of astrophysical systems. Such systems involve both distance scales and energy scales far larger than we could hope to reproduce on Earth, making them an excellent testbed for new physics. Such extreme environments allow us to probe even very weak couplings between axions and the Standard Model with increasing reach, aided by continuing improvements in our observational capabilities. I will discuss current directions in astrophysical searches for axions, ranging from axion-photon interconversion to primordial production to black hole superradiance. I will suggest how these techniques will improve with the next generation of telescopes.

Notes: