# University of Hertfordshire UH

**Department of Physics, Astronomy & Mathematics** 



Bayfordbury Observatory



@BayfordburyObs

# 7th FEBRUARY 2025

# AURORAE AND OUR SOLAR SYSTEM

(Due to limited parking, please limit your visit to 2 hours)

#### Research Talks

Talks are located in the Café space on the right of the main entrance Each talk will last approximately 30 minutes followed by time for questions.

#### 1.18:45- "Sizes and Scales in the Solar System"

Aarushi Singh

Join us for an exciting session exploring the wonders of our Solar System! Designed for children and families, we expect lots of participation! We will be introducing the relative sizes of the planets, sharing fascinating fun facts, and wrapping up with a short quiz to test how much everyone remembers!

#### 7. 19:45 "The Problem with Our Sun"

Dr. Will Bate

Why is the Sun's corona, its outer atmosphere, millions of degrees hotter than its surface? This talk explores the mystery of the coronal heating problem, revealing how magnetic fields, plasma waves, and solar flares may hold the answer. Discover why solving this puzzle matters for space weather and technology.

#### 3. 20:45- "Aurorae beyond the Earth"

Dr. Ben Burningham

Did you know that we don't only see aurorae on Earth? We also see them on other planets in our solar system, and beyond. In this talk Dr Ben Burningham will bring you up to speed on the different ways that we see aurorae on Earth and beyond, and even on worlds adrift without a parent star.

## Telescopes

The telescopes are a short walk from the main building on a paved, level path. Exit the doors at main reception, turn left and follow the lit path. Please stay on

Once you are at the telescopes, you may enter any dome that has its door open to view and, weather permitting, look through our telescopes with guidance from our astronomers...

### Planetarium Shows

Shows will be taking place throughout the evening in our two domes. You can book your spot at reception. One is located in our lab to the right of reception and the indoor planetarium is upstairs at the end of the corridor. Please arrive a few minutes early for your show and queue outside. If you miss your show, we cannot guarantee you a place in another.



Please do not take food or drink into the planetariums or telescope domes.

#### Activities & Demos

Follow the upstairs corridor to find a range of activities and demonstrations lead by astrophysics students. researchers, and members of the Hertford Astronomy Group.

·Make-a-Comet: See how we can build comets here on

·Explore how infrared cameras work, just like the one on the JWST

•Explore the sizes and scales of planets in our Solar System with everyday objects

·Make a Straw Ariane 5 Rocket: Do you have what it takes to be an aerospace engineer and design, build and launch a rocket with the JWST inside? ...and much more!

#### **Toilets**

The accessible and men's toilets are on the ground floor and the women's are at the top of the stairs. There is an accessible toilet at the telescopes

There is no scheduled fire alarm. In the event of an alarm, please proceed to the car park.