

6th DECEMBER 2024

GALAXIES AND BLACK HOLES

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

• Research Talks

Talks are located in the Café space on the right from the main entrance. There is no need to book a place; just turn up and take a seat 5 minutes before the talk is due to start. Each talk will last approximately 30 minutes, followed by time for questions.

1. 18:00- "Supermassive Black Holes: What are they?"
Maddie Silcock

Supermassive Black Hole- it's not just a great Muse song, it's also one of the most complex, powerful, and enchanting astrophysical entities nature has to offer. In this talk we will tour what these phenomena are and what makes them so interesting and important to Galaxies. We will then explore how Humanity's understanding of SMBHs has developed in light of results from the recent flagship mission JWST, and the ongoing questions bubbling in research.

2. 19:00- "The Andromeda Galaxy: Know Thy Neighbour"
Dr. Souradeep Bhattacharya

The Andromeda Galaxy, our Milky Way's largest neighbour, has fascinated humanity for centuries. Its distance measurement a century ago revealed the existence of countless galaxies beyond our own. Once thought to be a twin to the Milky Way, recent discoveries show that Andromeda's unique formation history sets it apart. This talk will explore Andromeda's intriguing past, its present-day properties, and its role in shaping our understanding of the universe.

3. 20:00- "How do supermassive black hole winds impact how galaxies evolve?"
Dr. Luke Holden

Supermassive black holes in the centres of galaxies can accelerate gas clouds to speeds of thousands of kilometres per second, which may remove gas that is needed to form stars from the galaxy. In this talk, I will discuss the work we are carrying out at the University of Hertfordshire to investigate this phenomenon and determine its true impact on galaxies.

• 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 the path.

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 selection of activities and demonstrations lead by astrophysics students and members of the Hertford Astronomy Group. Including:

- Make-a-Comet: See how we can build comets here on Earth.
- Design your own galaxy: use playdoh to make your own spiral galaxy
- Galaxy zoo: learn about different types of galaxies and how you can do real science from your computer
- 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.