

Women in Astronomy

HISTORY
OF SCIENCE
MUSEUM



Department of Physics

Key Stage 4 Study Day

Friday 3 March 2023

HANDS-ON STUDY DAY

The History of Science Museum is joining forces with Oxford University's Physics Department to inspire the women astronomers and astrophysicists of the future.

This is a chance for girls in Years 9-11 to find out more about women in astronomy and their amazing work. Exploring ideas about space, the Universe and big cosmological questions, they'll discover how our understanding of the universe is influenced by women both past and present. As well as exploring how we study the cosmos, they'll meet women astronomers working in Oxford – and consider whether a career in astronomy might be for them!

A: Observing the Universe: From Galileo to Jump-Cannon * [History of Science Museum]

A hands-on workshop looking at the invention of the telescope, Galileo's observations, the work of William and Caroline Herschel, and the discoveries of Annie Jump Canon. Students will encounter a range of instruments including astrolabes and telescopes, and more information about women in astronomy.

B: Simulating the stars

[Physics, Denys Wilkinson Building]

From Ada Lovelace, the first "computer programmer", to Grace Hopper, who wrote the first "compiler" of machine code, notable women have left their mark on the history of computing. Students will see how to use computer simulations both to study the physics of stars and black holes, and to help solve mysteries about the origins of the Universe.

PROGRAMME

0915 Arrive at the History of Science Museum

0930 Key note talk

0945 Travel to next session

0955 Workshop session 1 (A/B/C in rotation)

1055 Travel to next session

1110 Workshop session 2 (A/B/C in rotation)

1210 Lunch and travel to next session

1250 Workshop session 3 (A/B/C/ in rotation)

1350 Travel to next session

1400 Panel discussion at the Museum

Students can put their questions to a panel of women scientists about their work in astronomy and astrophysics.

1430 Finish

Booking information

e: learning@hsm.ox.ac.uk

t: 01865 277297 (Chris Parkin)

- **12 places per school**
- Charge **£5 per student**
- * **Sessions A&C:** Apologies – there is no wheelchair access to the Wetton Telescope and limited lift access at the Museum.

C: Big telescopes and modern techniques of observation *

[Physics, Denys Wilkinson Building]

A short introductory talk about why modern astronomers still look to the skies followed by small group tours of the department's 0.4m reflecting telescope. Students will find out about other telescopes around the world and the ground-breaking discoveries of Jocelyn Bell-Burnell.