## Global Summer School 2025





## Astronomy, Rocketry, and Space Science - 10cps

## Learn about space science from an academic who has been part of the team that designed SMILE, a major European Space Agency satellite mission!

On this course you will:

- Understand how space science affects all parts of everyday life and every academic discipline, from biology to psychology to art!
- Learn to be a rocket scientist without the need for advanced mathematics
- Gain confidence to discuss the private space industry vs space agency missions, and the risks of space tourism.

You will develop your practical skills and have the opportunity to do some observing (either of the sun or stars weather dependent). At the end of the course you will be able to describe what is in the night sky, what people believed about it in the past, and what direction private space industry is going in.

## Content:

This course will introduce you to a range of topics within space science, with both traditional and modern approaches. There will be a focus on the range of different science backgrounds and opinions. This course will cover:

- How different cultures saw the nights sky including constellations and myths
- Advances in observing the nights sky by changes in telescope design
- What different types of stars and galaxies are there?
- What is our solar system like
- What do we do with images from space
- How to be a rocket scientist
- Space agencies around the world
- Exoplanets, exobiology, exochemistry, and exomedicine
- Space tourism and private space travel

Field trips are included to consolidate your learning.



Your course tutor is Ian Whittaker, Senior Lecturer in Physics and Maths in our School of Science and Technology.

