

# Bringing the Universe to your Classroom

Faulkes Telescope Project



Prosiect Telesgôp Faulkes

Dr Sarah Roberts

Faulkes Telescope Project/Swansea University

[sarah.roberts@faulkes-telescope.com](mailto:sarah.roberts@faulkes-telescope.com)



# INTRODUCTION

The Faulkes Telescope Project provides free access to a global network of robotic telescopes for education through our partnership with Las Cumbres Observatory.

We also offer free teacher CPD and resources for STEM education. Schools can spot new supernovae, catch a comet, gaze at galaxies - bring the Universe to your classroom and carry out real research with astronomers!

## GLOBAL TELESCOPE NETWORK

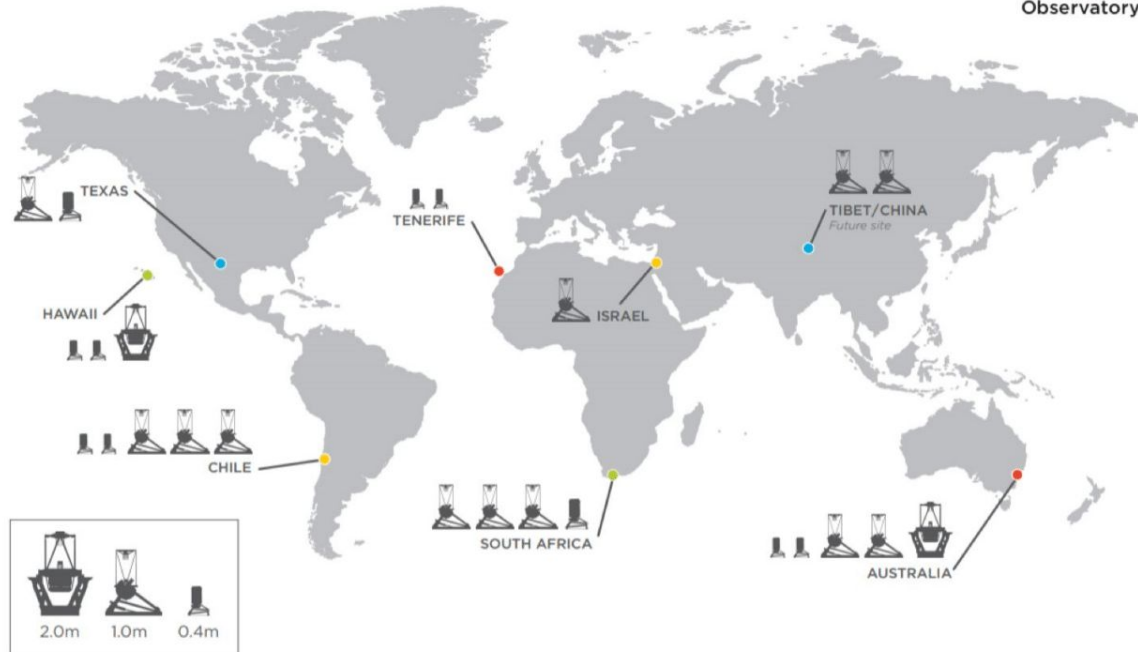


Figure 1. The location of the LCO telescopes

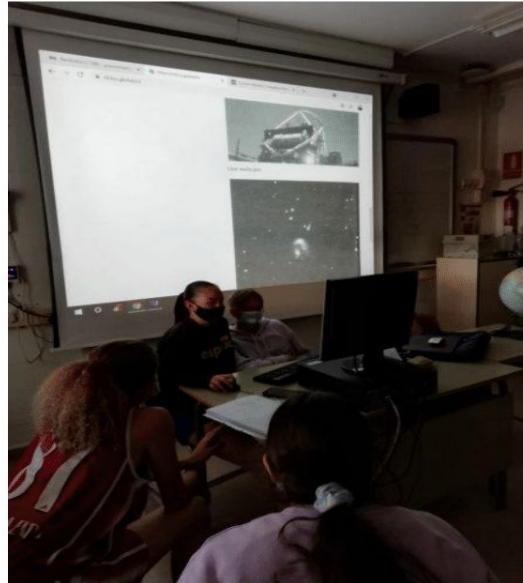
# COLOUR IMAGING



Figure 2. Spiral galaxy NGC 7331

A group of 12 - 16 year olds from Alcarràs, Catalonia have been learning how to operate the telescopes of the LCO network, guided by their teacher, José Manuel Pérez. Here are some of they took and processed as part of this year long programme learning about astronomy and robotic telescopes.

Figure 3. Students in Catalonia using the Faulkes Telescopes



It's been a lovely year full of positive news. I hope that we will continue to work on this type of project from now on. Thanks for this opportunity

From my point of view, it has been a unique and incredible experience full of learning

Figure 4. Globular cluster M71





# REAL RESEARCH

Many of the schools who use the LCO telescopes carry out real astronomical research, aimed at helping real astronomers with their work. Most recently, as part of the 'Comet Chasers' project, school children in Wales, UK imaged the binary asteroid system Didymos to gather data for NASA's DART (Double Asteroid Redirection Test) mission. Figure 5 shows the extended tail produced by the impact, taken on Oct 1st from the 2-m LCO Faulkes Telescope North in Hawaii.



*Figure 5. Image Credit: Helen Usher, Comet Chasers, Tim Lister / LCO, Faulkes Telescope Project.*



*Figure 6. School children in Montgomery School watch NASA's DART mission in the classroom*



# ART, LANGUAGES & SCIENCE



Some schools have also used the telescopes as part of Art lessons, using image processing software to create beautiful digital images based on their observations (figure 7). Others have used the telescopes to enhance their language lessons by looking at objects discovered by French astronomer, Charles Messier, and then writing about them in French (figure 8).

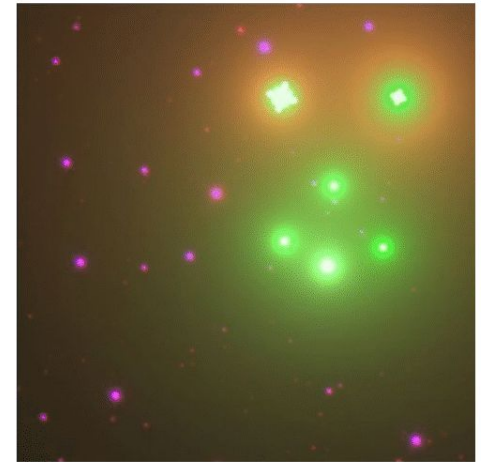


Figure 8. Using robotic telescopes as part of the French lesson

Figure 7. Digitally processed images based on observations taken with Faulkes Telescope North as part of a school Art lesson.