

## WANT TO LEARN MORE?

2015 sees the Centre for Lifelong Learning at the University of York launch its Postgraduate Diploma in Astronomy. Delivered online via distance learning, this new award will bring together students from across the globe, exploring the shared wonder of the night sky.

Dr Alex Brown, lead academic on the programme, says; "The stars have fascinated humans for millennia. From simple naked eye observation in prehistoric time to modern day telescopes, space has never lost its draw. Unlike so much cutting edge science, astronomy is an inclusive modern science; even without any special equipment you can still observe breath-taking astronomical phenomena.

The aim of our programme is to give students a solid foundation of knowledge which will allow them to undertake their own research. We will cover all the main branches of astronomy, from radio astronomy through the infra-red and into the visible before travelling to ever-increasing energies of radiation to x-rays and gamma-rays, before concluding with

neutrino, cosmic ray and gravity wave astronomy. The programme will not be limited to observational astronomy, however: we will explore the birth, lives and deaths of stars and phenomena that drive these nuclear furnaces and also study the very history and nature of the universe itself, with an introduction to cosmology."

In addition to weekly online materials and exercises, students will be invited to an annual residential weekend to carry out astronomical observations from the University of York's Astrocampus, and meet with scientists at the front line of astrophysical research.

The programme launches in late September 2015, and is aimed at home astronomers and the academically-inclined. Applications are being taken now.

More information about the programme and admissions criteria can be found at <http://www.york.ac.uk/lifelonglearning/astronomy>.

Course participants will have the option of attending a residential weekend at Astrocampus. Students can use the suite of optical, radio and solar telescopes in practical workshops and meet research scientists.



## EVENTS

May	21	Astrocampus Opening
	31	Astro photography Competition Closes
June	14	Big Telescopes Family Day
	14	Dr Karen Masters Talk
	15	Dr Ruth Bamford Talk
	16	Prof Tim O'Brien Talk
	18	Astrocampus Opening

For details on our open nights and to make a booking, please go to [www.astrocampus.org.uk](http://www.astrocampus.org.uk)

## CONTACT US

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# ASTRO NEWS



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## EVEN BIGGER TELESCOPES!

If you have been lucky enough to visit Astrocampus and have looked through our optical telescopes, you may have marvelled at the amazing views of Jupiter or the Moon. Our largest telescope has a primary mirror 35 centimeters in diameter. Now imagine a telescope with a mirror 8 meters across! But you don't have to just imagine, come see our Big Telescopes exhibition and you can experience the VLT (Very Large Telescope) in 1:4 scale (it is still huge)!

The exhibition includes other models, hands-on activities, demonstration talks and lectures from expert astronomers. Families, students, space enthusiasts and those with a general interest in astronomy are all welcome.

Big Telescopes is themed around some of the largest telescopes astronomers use in all areas of the electromagnetic spectrum. Find out how they work, what they are looking for and some of the amazing discoveries they have made. There is even a way for you to contribute to real science with the Galaxy Zoo project ([www.galaxyzoo.org](http://www.galaxyzoo.org)). Project scientist Dr. Karen Masters is giving a talk to explain more.

But astronomy is not all about what we can see. Astronomers use types of light we can't see to glean information about the Universe too. You may have seen our 3m radio dishes on Astrocampus, what do you think a 76m dish gets up to? Prof. Tim O'Brien from Jodrell Bank will be here to pose the question 'Is anybody out there?'

Beyond looking up using telescopes we want to get out into space ourselves and explore! But Space is a dangerous place. Find out from Dr. Ruth Bamford from RAL Space how we can protect astronauts with technology that looks like it came straight from Star Trek!

All events and the exhibition are free. More information and tickets for the talks are available from [www.astrocampus.org](http://www.astrocampus.org).

Finally don't forget to get your entries in for the Astrophotography competition that closes on 31<sup>st</sup> May! We have some great prizes and full entry details are on the website.

Best Wishes and Clear Skies!

**Dr. Emily Brunsten**  
Director of Astrocampus



## UPDATE

There was lots of excitement surrounding the solar eclipse in March, and we were really lucky to have an almost cloud-free view here in York. Over 150 people joined us on the Astrocampus to watch the eclipse through a mixture of homemade viewers such as colanders and pin-hole cameras, solar viewing glasses, and our solar telescopes. Our Astronomers were also out and about in Primary Schools, where the children had an unforgettable experience seeing this once in a lifetime astronomical event.

Enjoy this selection of images of observers and the eclipse itself.

**Katherine Leech**  
Outreach Officer

