Graduate Intern for Physics Outreach
Department of Physics

Closing date: 6 August 2019
Interview date: 27 August 2019
Vacancy reference: 7830
INTRODUCTION

This graduate internship is a fixed-term post designed to offer a recent graduate experience in the field of science communication. The intern will be involved in a range of departmental outreach initiatives including the Astrocampus (University Observatory), the Cosmodome (inflatable planetarium), and Binding Blocks (teaching nuclear physics using Lego). Tasks will include event management, marketing and publicity, supporting volunteers, responding to enquiries, liaising with schools and community groups, and working with young people and the general public to inspire and enthuse them with physics. The role will include mentoring and support by the Schools Outreach and Public Engagement Coordinator for the department, the Director of the Astrocampus, and the STFC Leadership Fellow in Public Engagement, who leads on the Binding Blocks project.
**JOB DESCRIPTION**

**At a glance**

<table>
<thead>
<tr>
<th><strong>Salary</strong></th>
<th>£15,839 a year / Intern Level 1.1</th>
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<tbody>
<tr>
<td><strong>Hours of work</strong></td>
<td>Full Time / 37 hours a week</td>
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<tr>
<td><strong>Contract type</strong></td>
<td>Fixed Term / 12 months</td>
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<tr>
<td><strong>Based at</strong></td>
<td>Heslington Campus West</td>
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**Condition of appointment**

This role is exempt from the Rehabilitation of Offenders Act. Consequently, all applicants will be asked to declare both unspent and spent convictions on their application form.

Appointment of the successful candidate will be conditional on a Disclosure and Barring Service check.

**Main purpose of the role**

The Graduate Intern for Physics Outreach will support the Department of Physics’ outreach programme. The post-holder will engage with schools, community groups and the general public to assist the Department in meeting the increasing demand for Astronomy and space-related activities and the growing Binding Blocks programme. They will work with the Physics Outreach Officer to plan and deliver a range of events that align with the Department’s outreach strategy; both utilising pre-existing resources and developing their own workshops.

**Key responsibilities**

(Role holders will be required to undertake some or all of the duties below)

- Support the organisation of key events including exhibitions, school residential, and nuclear masterclasses at both the University of York and across the UK
- Liaise with schools and community organisations (such as Scouting/Guiding groups and amateur astronomy groups) to arrange Astrocampus tours, workshops and outreach activities
- Assist with training undergraduate volunteers on practical astronomy and Binding Blocks activities and support them in the delivery of these activities
- Contribute to the production of publicity materials including web pages, social media and newsletters
- Respond to standard enquiries, referring non-standard enquiries to the Schools Outreach and Public Engagement Coordinator
- Contribute to the development of administrative systems such as volunteer coordination, event ticketing, and schools bookings
- Develop content for shows in the inflatable planetarium, the Cosmodome
- Deliver activities for young people and the general public to enthuse and inspire them with Physics
- Assist with monitoring and evaluation of activities

The above list of duties is not exhaustive and is subject to change. The post holder may be required to undertake others duties within the scope and grading of the post.
## PERSON SPECIFICATION

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>Recent undergraduate degree</td>
<td>Essential</td>
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<tr>
<td>Eligible to work in the UK</td>
<td>Essential</td>
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<tr>
<td>Driving Licence</td>
<td>Essential</td>
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<tr>
<td>Degree in Physics/Astronomy/Astrophysics/joint honours with Physics</td>
<td>Essential</td>
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### Knowledge

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<tr>
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<th>Essential / Desirable</th>
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<tr>
<td>Knowledge of MS office applications (particularly Word, Excel, PowerPoint) and Google Docs</td>
<td>Desirable</td>
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<tr>
<td>Knowledge of telescope operation and practical astrophysics</td>
<td>Desirable</td>
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<td>Knowledge of regulations concerning working with children</td>
<td>Desirable</td>
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### Skills, abilities and competencies

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<thead>
<tr>
<th>Skills, abilities and competencies</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>Excellent IT skills</td>
<td>Desirable</td>
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<tr>
<td>Excellent communication skills, both written and oral.</td>
<td>Essential</td>
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<tr>
<td>Excellent organisation skills with the ability to work within established procedures and processes</td>
<td>Essential</td>
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<tr>
<td>Ability to work independently and as part of a team</td>
<td>Essential</td>
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<tr>
<td>Good organisation and time management skills with the ability to work effectively under pressure</td>
<td>Essential</td>
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<td>Ability to multi-task and meet targets</td>
<td>Essential</td>
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## PERSON SPECIFICATION

<table>
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<tr>
<th>Experience</th>
<th>Essential / Desirable</th>
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<tr>
<td>Experience of event organisation</td>
<td>Desirable</td>
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<tr>
<td>Experience of working with young people</td>
<td>Essential</td>
</tr>
<tr>
<td>Experience producing publicity materials</td>
<td>Desirable</td>
</tr>
<tr>
<td>Experience communicating Science to a non-academic audience</td>
<td>Essential</td>
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### Personal attributes

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</thead>
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<tr>
<td>Highly organised with a proactive, self-starting approach to work</td>
<td>Essential</td>
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<tr>
<td>Enthusiastic and resilient with an eagerness to learn</td>
<td>Essential</td>
</tr>
<tr>
<td>A professional and approachable manner</td>
<td>Essential</td>
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<tr>
<td>Flexible and willing to work across different locations and outside normal working hours (eg occasional evenings and weekends)</td>
<td>Essential</td>
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<tr>
<td>An eagerness to further develop a career in science communication</td>
<td>Desirable</td>
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THE DEPARTMENT

The Department of Physics is a large and active department with research strengths in plasma physics and fusion, nuclear physics, condensed matter physics and biophysics. It has a proven track record of effective outreach with an extensive and highly successful programme of activities and events engaging with over 10,000 people each year. Further information is available at: https://www.york.ac.uk/physics/public-and-schools/

The Astrocampus (the University Observatory) with its associated outreach programme (including the Cosmodome) is a flagship initiative. Astronomy and Space Science activities and events engage with children from pre-school through to sixth form in both formal and informal learning environments, as well as with the general public and specialist groups. Further information is available at: astrocampus.york.ac.uk

Binding Blocks in a project designed to engage sixth-form students and the general public with the Department’s nuclear physics research through the medium of a giant (8m long) Lego® nuclear chart. Further information is available at www.york.ac.uk/physics/bindingblocks

The Department of Physics: http://www.york.ac.uk/physics is a department at the forefront of pioneering global research and technological advancement in our world leading research centres, focused around biophysics, condensed matter physics, nuclear physics, and plasma physics and fusion energy at the York Plasma Institute.

The Department has a lively and expanding research programme, and the research interests span a wide range, within both physics and the interactions of physics with other disciplines. We have benefited from substantial investment in these research groups, to help them play a leading role on the national and international stage, collaborating with major research institutions and industries. The research groups have international recognition, and each group regularly publishes papers in major journals and presents papers at international conferences.

The Department has many collaborations with other research groups in the UK and abroad, and contacts with industrial researchers. The Department also leads several inter-departmental ventures, including the Biological Physical Sciences Institute (BPSI), the York Quantum Technologies Centre (YQTC) and the EPSRC Quantum Communications Hub. There has been significant major investment in laboratories and facilities including the York-JEOL Nanocentre and the York Plasma Institute, and we have excellent mechanical, computing and electronic workshop facilities, which support our research and teaching activities.

We have developed a range of undergraduate and postgraduate programmes that provide all our students with the skills to succeed in careers across a broad range of
THE DEPARTMENT

scientific, technological, and related disciplines, and provide opportunities for students to spend a year at one of a number of overseas universities or in industry as an integral part of their degree programme. The Department offers both three year BSc and four year MPhys degree programmes in Physics, Theoretical Physics and Physics with Astrophysics; and joint degree programmes in Maths and Physics and Physics with Philosophy. For postgraduates it offers a taught MSc in Fusion Energy, an MSc by Research and PhD degrees, including leading the EPSRC Centre for Doctoral Training in the Science and Technology of Fusion Energy.

The Department has 58 academic staff members (including teaching-only staff) and amongst our academic staff we have Fellows of the Royal Society and the Institute of Physics, many national and international prize winners, contributing to a dynamic and thriving department. We have over 40 research staff, an increasing number of visiting researchers, and 40 support staff (technical and administrative). The student population comprises around 450 undergraduates and 120 postgraduates (mostly PhD).

The Department of Physics operates a set of family-friendly policies and welcomes applications that are made on a part-time and job share basis, and we will do our best to accommodate such requests where possible. Staff working patterns are flexible and a formal flexitime system is also in operation. We provide support and advice for staff taking maternity, paternity, adoption and parental leave, and the University has a nursery and a Child Care voucher scheme.

Further information about the department is available at: http://www.york.ac.uk/physics
Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2019 it is the home of more than 18,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world's leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and one of just six post-war universities to have appeared in the world top 100. We were rated 22nd in the 2019 Times & Sunday Times league table. The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding multiple awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we’ve worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.

THE UNIVERSITY
THE CITY AND THE REGION

The City of York

Internationally acclaimed for its rich heritage and historic architecture, York’s bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford’s Tower and the Shambles - just a few of the many attractions.

But York isn’t just a great place to visit - it’s also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit www.visityork.org for more information on the city of York

Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

Great location

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online

- Go to https://jobs.york.ac.uk
- Find this job using reference 7830
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 6 August 2019.

What will I need?

We will ask you for details of:
- your employment history
- relevant qualifications
- two referees

You need to be ready to show us how you meet the requirements of the job, either in a written statement and/or by answering questions.

Help and assistance

Direct any informal queries to Katherine Leech, Schools Outreach and Public Engagement Coordinator for the Department of Physics, on katherine.leech@york.ac.uk or 01904 32209/6361.

If you have any questions about your application, contact the HR Services team:

recruitment@york.ac.uk

+44 (0)1904 324835