UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Early Stage Researcher in Spintronics, School of Physics and Astronomy

Salary: In line with Marie Skłodowska Curie Innovative Training Network requirements

Reference: MAPPA1048

Closing date: 22 December 2017

Fixed-term for 36 months

Available from 1 March 2018

Early Stage Researcher in Spintronics, Marie Skłodowska-Curie Innovative Training Network, School of Physics and Astronomy

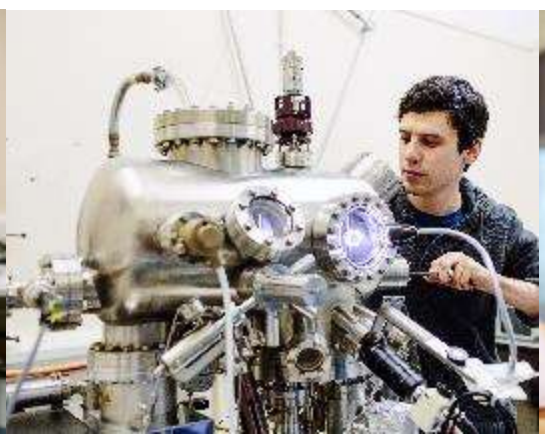
Are you a rising star in the field of Spintronics, in the first four years of your research career and based outside the UK? Do you want to further your career and attain a PhD in one of the UK's leading research intensive universities?

QuESTech is a Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN-ETN) involving seven leading European research laboratories and two high-tech companies. Supported by the European Union, QuESTech will provide challenging, state-of-the-art training for early stage researchers in the general field of experimental, applied, and theoretical quantum electronics. The main scientific topics include spintronics, molecular electronics, single electronics, transport in low-dimensional structures, and quantum thermodynamics.

As an Early Stage Researcher in Leeds, you will undertake research in spin-polarisation of currents carried by the edge states in InAs/GaSb quantum spin Hall systems (QuESTech ESR 9). You will interact and develop research collaborations with our QuESTech consortium partners and in addition you'll participate in activities of the Innovative Training Network, including attending training courses and visiting other sites.

To meet the requirements of the Marie Skłodowska-Curie Innovative Training Network, you will be an early stage researcher within the first four years of your research career, have not yet been awarded a doctoral degree (PhD), and have not lived or carried out your main activity (work/study) in the UK for more than 12 months during the past three years. You will also need to have the flexibility to travel throughout the European Union.

As well as previous research experience, you will have a good undergraduate degree (with a minimum 2.1 or above or equivalent) in Physics or Applied Physics with experimental experience, and be eligible to enrol on a PhD degree. You'll also have excellent communication and organisational skills and a strong commitment to your own professional development.


Salary: (Faculty Research Office to confirm)
The Marie Skłodowska-Curie Early Stage Researcher living allowance is fixed at €44,895 p.a. per annum plus allowances. This amount will be subject to tax and employer's and employee's National Insurance deductions, and will be paid in UK Sterling (£) using an appropriate conversion rate.

What does the role entail?

As an Early Stage Researcher your main duties will include:

- Performing original research, at a level suitable for PhD, under the supervision of the project managers, in spintronics consistent with the research plans of QuESTech.
- Contributing to the QuESTech Innovative Training Network (ITN) under the supervision of Professor C H Marrows;
- Participating in QuESTech ITN activities to ensure a successful programme of investigation, including attending group meetings and seminars, training courses and site visits; as well as collaborating with academic and industrial partners;
- Passing progression requirements at various points during your studies (specifically at months 4, 11, 24 and 36) and meeting all other School, Faculty and University requirements for PhD studies;
- Attending the weekly Condensed Matter (CM) group meeting when possible and reporting on your work and plans;
- Contributing to the dissemination of research results in leading peer-reviewed journals and through presentation at meetings and conferences, with guidance as necessary;
- Ensuring good progress of your work and keeping up-to-date records;
- Providing support and advice to other members of the ITN;
- Working both independently and as part of a larger team of researchers and stakeholders;
- Continually updating your knowledge, understanding and skills in the research field in which you work.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.



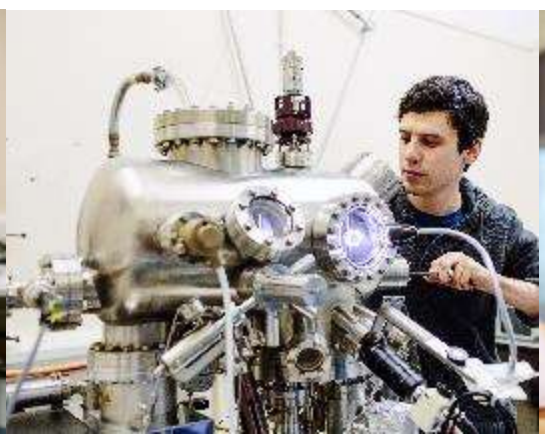
What will you bring to the role?

As an Early Stage Researcher you will have:

- A good undergraduate degree/Masters (2:1 or above, or equivalent) in Physics or Applied Physics;
- The ability to meet all eligibility requirements for appointment in the UK as an Early Stage Researcher funded by the Marie Skłodowska-Curie Innovative Training Network:
    - You must be within the first four years (full-time equivalent) of your research career, and have not yet been awarded a doctoral degree (e.g. PhD), at the time of recruitment to this role;
    - You must not have resided or carried out your main activity (such as work or study) in the UK for more than 12 months during the three years prior to your recruitment to this role;
- The ability to meet the University's eligibility requirements to enrol on a PhD degree, including English language requirements if English is not your first language;
- The flexibility to travel throughout the European Union;
- Experience of undertaking academic research, including experimental work;
- Good interpersonal and communication skills, both written and verbal, and the ability to communicate effectively with a wide range of stakeholders;
- Good time management and planning skills, with the ability to meet tight deadlines and manage competing demands effectively;
- A proven ability to work well both independently and as part of a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Evidence of contributing to papers in internationally recognised, peer-reviewed journals or evidence of publishable research in progress;
- Undergraduate level knowledge and experience of condensed matter or materials physics, in terms of both theoretical and experimental methods.


How to apply

You can apply for this role online; more guidance can be found on our How to Apply information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Professor Christopher Marrows, Professor of Condensed Matter Physics
Tel: +44 (0)113 343 3780
Email: C.H.Marrows@leeds.ac.uk

Additional information

Our Research
Further information is available on the research and teaching activities of the School of Physics and Astronomy and the Marie Skłodowska-Curie research and innovation scheme.

Working at Leeds
Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our Working at Leeds information page.

A diverse workforce
The Faculty of Mathematics and Physical Sciences is proud to have been awarded the Athena SWAN Bronze Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Candidates with disabilities
Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at disclosure@leeds.ac.uk.



Criminal record information

Rehabilitation of Offenders Act 1974
A criminal record check is not required for this position. However, all applicants will be required to declare if they have any ‘unspent’ criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information page.