Newcastle University PhD Studentship award

Title
PhD in Physics

Value of award
A tax-free stipend of £14,777 per year (subject to minor change) and 100% UK tuition fees. We will consider covering the EU/international fees for outstanding students and where possible.

Number of awards
1

Start date and duration
September/October 2019 for 3.5 years

Application closing date
31st January 2019

Overview
The School of Mathematics, Statistics and Physics at Newcastle University invites applications for a funded PhD studentship to join one of our world-leading research groups.

We are excited to work with you to design a project to explore device physics and/or the physics of materials at the cutting edge in one of the following broad areas:

Device physics is the mastery of materials at the nanoscale. Current state-of-the-art focuses on materials by design, specifically tailoring properties to solve real problems and advance our physical understanding. The Emerging Technology and Materials group offers a wide variety of projects in applied nanoscale physics, from Photovoltaics and Non-linear optics to Low-dimensional materials and systems.

Materials Modelling. We use and develop theoretical and numerical / simulation techniques to understand the fundamental properties of materials. Our group employs sophisticated methods and algorithms, such as Monte Carlo simulations and Density Functional Theory, to model materials based on the fundamental equations of quantum mechanics, and therefore aims to predict such properties without empirical input. This is a rapidly changing and exciting field of research given continually improving methods coupled with ever more powerful supercomputers.

For more details on available projects, please visit our website.
Sponsor
School of Mathematics, Statistics and Physics / Engineering and Physical Sciences Research Council (EPSRC)

Name of supervisor(s)
Dr Pablo Docampo, Dr Angela Dyson, Dr Toby Hallam, Dr Noel Healy and Dr Mark Rayson.

Eligibility Criteria
You must have, or expect to achieve, at least a 2:1 honours degree or international equivalent, in Mathematics, Physics, or a related subject such as Chemistry or Engineering. Applicants whose first language is not English require a minimum of IELTS 6.5.

How to apply
You must apply through the University’s online postgraduate application system. To do this please ‘Create a new account’.
All relevant fields should be completed, but fields marked with a red asterisk must be completed. The following information will help us to process your application:
• insert the programme code 8821F in the programme of study section
• select ‘PhD Physics (FT)’ as the programme of study
• insert the studentship code MSP009 in the studentship/partnership reference field
• attach a covering letter and CV. The covering letter must state the title of the studentship, quote reference code MSP009 and state how your interests and experience relate to the project
• attach degree transcripts and certificates and, if English is not your first language, a copy of your English language qualifications.

Contact
For any question, contact
Dr Pablo Docampo, Tel: +4419120888642, email: pablo.docampo@newcastle.ac.uk