



OPPORTUNITY

Postdoctoral Research Associate

Reference: R210170

Salary: Grade 8, £35,845 per annum

Contract Type: Fixed term up to 18 months (at point £35,845)

Basis: Full Time

Job description

Job Purpose:

The post holder will be funded by the Engineering and Physical Sciences Research Council (EPSRC) through the prestigious New Horizons programme. The post holder will be involved in the theoretical development for a cutting-edge research project is entitled “Optimisation of Complex Networks towards Complexity”. The project includes the implementation of several complexity measures, and to cross-validate them through an evolutionary framework. Extensive numerical investigations are to be complemented by analytical studies of network ensembles. The project includes also applicational case studies into logistic and transportation networks, and dynamics in neural networks, to investigate in each context whether higher complexity is beneficial.

Main Duties and Responsibilities

Research

- ▶ To carry out research in line with the project plan implementing novel ideas and contributing to the planning of associated research tasks.
- ▶ To communicate and present research results within the research group meetings, and at national and international meetings.
- ▶ To contribute to publications of research outcomes in journals of high standard.
- ▶ To travel nationally and internationally to disseminate research output, get involved in all aspects of the project and plan future research proposals.
- ▶ To fully support the development of further research proposals, contributing novel ideas, concepts and background material.
- ▶ Where appropriate to School/University strategy and subject discipline, to participate in and develop external networks.
- ▶ To supervise and manage research project workpackages.
- ▶ To assist in the supervision of PhD students and MSc research projects.
- ▶ To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Teaching

- ▶ To undertake a limited amount of teaching with students at a range of levels, achieving good student feedback through critical reflective practice.
- ▶ To contribute to the assessment of student knowledge and the supervision of student projects.
- ▶ To assist in the development of student research skills.

External engagement

- ▶ To represent the interests of the subject and School in activities to raise the regional, national and international profile, particularly with the professions, schools and businesses.
- ▶ To engage, where appropriate, disseminating the school offers and research scope in outreach events and online media.

Citizenship

- ▶ To demonstrate the University's academic and leadership values through own actions and behaviour.
- ▶ To engage in School committees and activities as appropriate.
- ▶ To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Additional responsibilities

- ▶ Engage in continuous personal and professional development in line with the demands of the role, including undertaking relevant training and development activities to develop themselves and support the development of others.
- ▶ Ensure and promote the personal health, safety and wellbeing of staff and students.
- ▶ Carry out duties in a way which promotes fairness in all matters and which engenders trust.
- ▶ Promote equality of opportunity and support diversity and inclusion as well as working to support the University's environmental sustainability agenda and practices.

Person specification

	Essential	Method of assessment
Education and qualifications	A PhD in mathematics, theoretical physics / systems biology or computer science, or a MSc in a cognate discipline with excellent research credentials.	Application form
Experience	<p>Experience of initiating and conducting research up to doctoral level.</p> <p>Experience in performing systematic numerical simulations.</p> <p>Experience of writing up/contributing to the write up of research for high quality publications.</p> <p>Experience of producing papers, posters, reports presenting at seminars, conferences etc.</p> <p>Experience of positive collaboration within and outside of candidate's immediate research team.</p>	Application form and interview
Aptitude and skills	<p>Fluency in programming.</p> <p>Interdisciplinary curiosity and ability to communicate with researchers across subjects.</p> <p>Ability to present data in both a clear and concise manner that is visually appealing.</p> <p>Ability to prepare written communications to a high standard</p> <p>Ability to develop and maintain a research programme and to publish in high quality publications.</p> <p>A willingness to undertake further training as appropriate and to adopt new procedures as and when required.</p>	Application form and interview

	Desirable	Method of assessment
Experience	<p>Knowledge of relevant background, especially Network Science, Evolutionary Dynamics, Complexity Science and/or Statistical Physics</p> <p>Experience with both theoretical and numerical research in an interdisciplinary context</p> <p>Supervising other personnel involved in the project</p>	Application form and interview
Aptitude and Skills	<p>Demonstrated aptitude for writing collaborative research proposals</p> <p>Record of coordination of scientific events and/or outreach activities</p>	

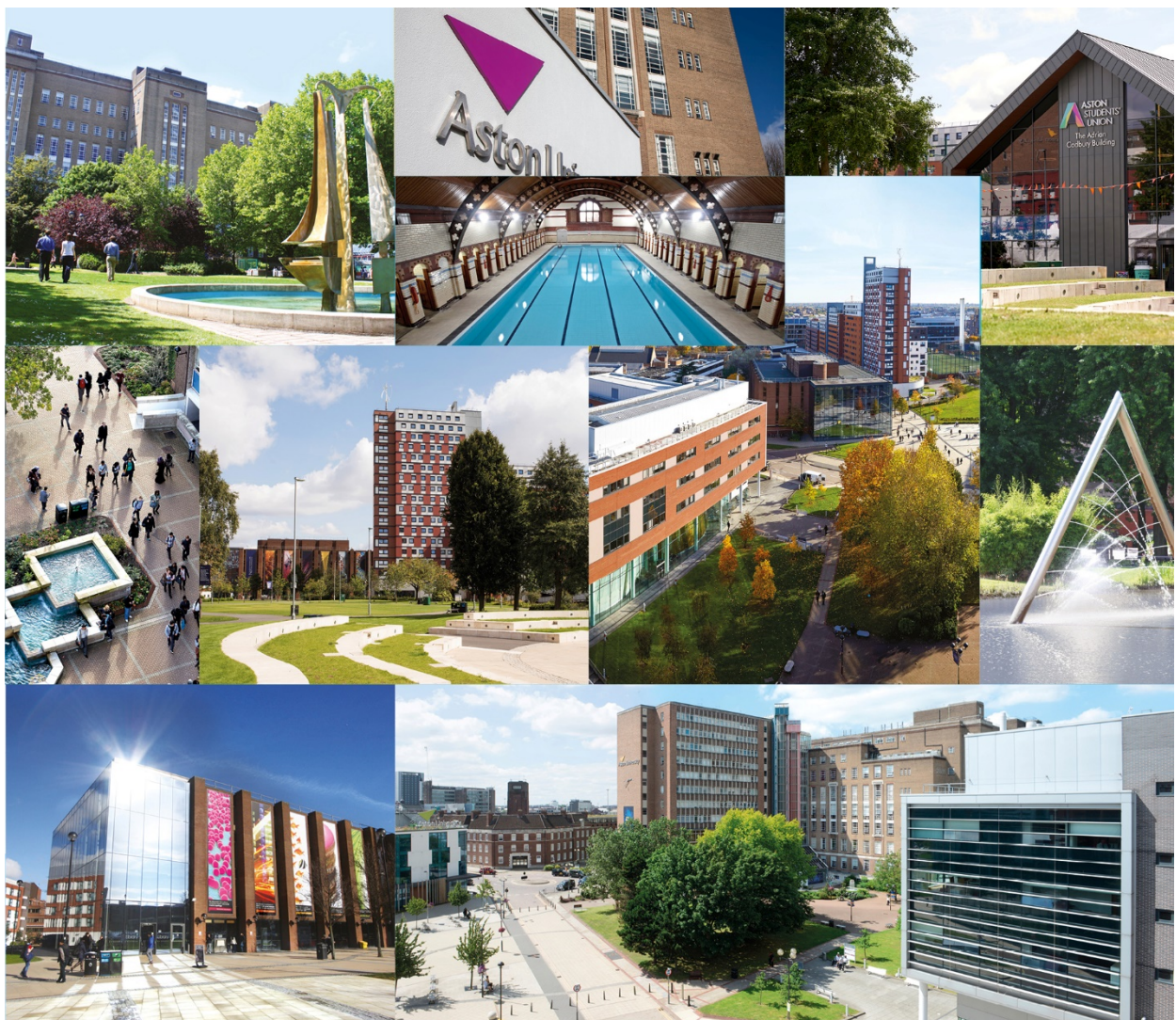
How to apply

You can apply for this role online via our website <https://www2.aston.ac.uk/staff-public/hr/jobs>.

Applications should be submitted by 23:59 on the advertised closing date.
All applicants must complete an application form, along with your CV.

Any CV sent direct to the Recruitment Team and Recruiting Manager will not be accepted.

If you require a manual application form then please contact the Recruitment Team via jobs@aston.ac.uk.



Contact information

Enquiries about the vacancy:

Name: Dr Jens Christian Claussen

Job Title: Lecturer (Mathematics)

Email: j.claussen@aston.ac.uk

Enquiries about the application process, shortlisting or interviews:

Recruitment Team via jobs@aston.ac.uk or 0121 204 4500.

Additional information

Visit our website <https://www2.aston.ac.uk/staff-public/hr> for full details of our salary scales and benefits Aston University staff enjoy

Salary scales: <https://www2.aston.ac.uk/staff-public/hr/payroll-and-pensions/salary-scales/index>

Benefits: <https://www2.aston.ac.uk/staff-public/hr/Benefits-and-Rewards/index>

Working in Birmingham: <https://www2.aston.ac.uk/birmingham>

Employment of Ex-Offenders: Under the Rehabilitation of Offenders Act 1974, a person with a criminal record is not required to disclose any spent convictions unless the positions they applying for is listed an exception under the act.

Eligibility to work in the UK:

Post-Brexit transition period / EU Settlement Scheme

The post-Brexit transition period ended on 31 December 2020. If you are an EU/EEA citizen and you were a resident in the UK before 31 December 2020, you and your family members (including non-EU citizens need to apply to the EU Settlement Scheme to continue to live, work and study in the UK beyond 30 June 2021. The deadline for applying to the EU settlement scheme is 30 June 2021. You can apply via the Government webpage

<https://www.gov.uk/settled-status-eu-citizens-families>

Irish Nationals do not need to apply for settlement as they retain the right to work in the UK.

New immigration system for EU/EEA and Swiss Nationals who were not resident in the UK before 31 December 2020

A new immigration system has been introduced for people arriving in the UK from EEA countries with effect from 1 January 2021. In addition to those who have always required a visa, EU citizens moving to the UK to work will need to get a visa in advance. You can find more information on the following website. Candidates should check their eligibility to enter or remain in the UK in advance of making any job application via the UKVI website <https://www.gov.uk/browse/visas-immigration/work-visas>. Before applying you should ensure that you meet the requirements, including meeting the English Language requirements. If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful.

If you require a visa to work in the UK the most common types of visa are:

Skilled Worker Visa

<https://www.gov.uk/skilled-worker-visa>

Global Talent Visa

If you are a leader or potential leader in one of the following fields you may be eligible to apply for a Global Talent Visa:

- Academia or Research
- Arts and Culture
- Digital Technology

Please click the following link for further information and to check your eligibility for this visa.

<https://www.gov.uk/global-talent>

Equal Opportunities: Aston University promotes equality and diversity in all aspects of its work. We aim to ensure, through our admissions policies for students, and our staff recruitment and selection processes that we encourage applications from all groups represented in the wider community at a local, national and international level.

The University will endeavour not to discriminate unfairly or illegally, directly or indirectly, against student or potential students, staff or potential staff. This commitment applies to all functions of the University and to any stage of an individual's career.

An Equal Opportunities Monitoring Form is included within the application form. Data you provide on the Equal Opportunities Monitoring Form will be included in a general database, for statistical monitoring purposes, enabling the University to monitor the effectiveness of its Policy, Codes of Practice and Guidelines on Equal Opportunities in Employment. Individuals will not be identified by name.

Data Protection: Your personal data will be processed in compliance with the Data Protection Act 2018 and the General Data Protection Regulation ((EU) 2016/679) ("GDPR"). The University's Data Protection Policy and Privacy Notices, including the Job Applicant Privacy Notice can be found at <https://www2.aston.ac.uk/data-protection>. Your application will only be used to inform the selection process, unless you are successful, in which case it will form the basis of your personal record with the University which will be stored in manual and/or electronic files. Information in statistical form on present and former employees is given to appropriate outside bodies.

Full details of our terms and conditions of service and associated policies and procedures are available online at <https://www2.aston.ac.uk/staff-public/hr/policies>

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gets real.**