ROLE PROFILE

Job Title  
Research Fellow

School/Department  
School of Mathematical Sciences

Job Family and Level  
Research & Teaching Level 4

Contract Status  
Fixed-term post for a period of 2 years

Hours of Work  
Full-time (36.25 hours)

Location  
School of Mathematical Sciences, University Park

Reporting to  
Dr Nikolaos Diamantis (Grant holder)

Purpose of the New Role

The person appointed will:

- Have specific responsibility for research, for developing research objectives and proposals with Dr Nikolaos Diamantis on the EPSRC funded project "Modular Symbols and applications."
- Plan and conduct work using approaches or methodologies and techniques appropriate to the type of research.
- Be responsible for writing up their work for publication and have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

Main Duties and Responsibilities

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<td>1</td>
<td>Undertake original research of international excellence.</td>
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<td>2</td>
<td>Develop research objectives and proposals for own and/or collaborative research area.</td>
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<td>3</td>
<td>Plan and conduct research using recognised approaches, methodologies and techniques within the research area.</td>
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<td>4</td>
<td>Analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area.</td>
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<td>5</td>
<td>Prepare papers for publication in leading journals and/or contribute to the dissemination at national/international conferences, workshops and meetings resulting in successful research outputs.</td>
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<td>6</td>
<td>Identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.</td>
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<td>7</td>
<td>Co-ordinate the operational aspect of research networks, for example, arranging meetings and updating web sites etc and contribute to collaborative decision making with colleagues in area of research.</td>
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<td>Provide support, guidance and supervision to other staff, where appropriate in own area of expertise.</td>
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<td>Collaborate with academic colleagues on areas of shared interest for example, collaborative or joint research projects.</td>
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<td>10</td>
<td>Plan and manage own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others.</td>
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<td>11</td>
<td>Utilise and contribute to organising research resources and facilities and workshops as appropriate.</td>
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## Knowledge, Skills, Qualifications and Experience

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<th>Qualifications/Education</th>
<th>Essential</th>
<th>Desirable</th>
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<td><strong>Qualifications/Education</strong></td>
<td>• PhD or equivalent, in a relevant branch of mathematics.</td>
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<td><strong>Skills/Training</strong></td>
<td>• Expert knowledge of Analytic Number Theory, preferably with emphasis on modular forms.</td>
<td>• Background knowledge in elliptic curves and Galois representations</td>
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<td>• Excellent oral and written communication skills, including the ability to communicate with clarity on complex information.</td>
<td>• Ability to foster a research culture and commitment to learn in others.</td>
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<td>• High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights.</td>
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<td>• Ability to creatively apply relevant research approaches, models, techniques and methods.</td>
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<td>• Ability to assess and organise resource requirements and deploy effectively.</td>
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<td>• Ability to build relationships and collaborate with others, both internally and externally.</td>
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<td>• Flexibility.</td>
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<td>• Ability to work independently and as part of a multidisciplinary and multicultural team.</td>
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<td>• Ability to network, actively engaging with and valuing other areas and diverse groups</td>
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<td><strong>Experience</strong></td>
<td>• Proven ability to produce research of high quality in analytic number theory or closely related discipline.</td>
<td>• Published papers in relevant academic journals.</td>
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<td>• Some practical experience of applying the specialist skills and approaches and techniques required for the role.</td>
<td>• Previous success in gaining support for externally funded research projects.</td>
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<td>• Experience of developing new approaches, models, techniques or methods in research area.</td>
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### Additional Information

The School of Mathematical Sciences is in the top ten mathematics departments nationally, and was recognised for the quality of its research in the most recent national Research Excellence Framework (REF). The REF assesses UK higher education institutions in all subject areas and is based on submissions provided by each university detailing their research and the wider societal impact that it has had. In the School, 32% of our research was recognised as world-leading and a further 56% as internationally excellent. Its research environment was classified as 75% world-leading in vitality and sustainability, with the
remaining 25% internationally excellent - reflecting the outstanding setting the School provides for its 80 academic staff as well as its postdoctoral and postgraduate researchers.

The School has a substantial student population which includes 850 undergraduate students, 80 postgraduate MSc students and 120 postgraduate PhD students.

The School is committed to promoting Equality and Diversity. This has been recognised in the awarding of an Athena SWAN Bronze Award, and the School is working hard towards further progress. Athena SWAN [http://www.athenaswan.org.uk/](http://www.athenaswan.org.uk/) recognises and celebrates good employment practice for women working in STEM subjects.

Applicants will be considered on an equal basis, subject to the relevant permission to work in the UK as defined by the requirements set out by UK Visas and Immigration. Please visit [https://www.gov.uk/government/organisations/uk-visas-and-immigration](https://www.gov.uk/government/organisations/uk-visas-and-immigration) for more information.

Informal enquiries may be addressed to Dr Nikolaos Diamantis, email: nikolaos.diamantis@nottingham.ac.uk. Please note that applications sent directly to this email address will not be accepted.