

IMPERIAL

Research Associate in Algebraic Geometry

Department/Division/Faculty:	Mathematics Department / Pure Mathematics Section
Campus/Location:	South Kensington Campus
Job Family/Level:	Research Job Family, Research Associate* (Research salary scale)
Responsible to:	Dr Soheyla Feyzbakhsh
Line management for:	N/A
Key working Relationships (Internal):	Members of Pure Mathematic Section
Contract type:	Full time – Fixed Term, 12 months (with the possibility of extension for one more year)

Purpose of the Post

The successful candidate will work closely with Dr Soheyla Feyzbakhsh and the algebraic geometry group at Imperial College on some aspects of the Royal Society fellowship, titled "Geometric Applications of Stability Conditions on Triangulated Categories."

This position is well-suited for candidates with expertise in one or more of the following areas: derived categories, Bridgeland stability conditions, Brill-Noether theory, K3 surfaces, Fano varieties, Donaldson-Thomas theory, and enumerative invariants in string theory.

Key Responsibilities

Research Duties:

- To take initiatives in the planning of research
- To direct the work of small research teams
- To identify and develop suitable techniques, and apparatus, for the collection and analysis of data
- To maintain accurate and complete records of all findings
- To write reports for submission to research sponsors
- To present findings to colleagues and at conferences
- To submit publications to refereed journals
- To provide guidance to staff and students
- To attend relevant workshops and conferences as necessary
- To develop contacts and research collaborations within the College and the wider community
- To promote the reputation of the Group, the Department and the College
- Contribute to bids for research grants
- To conduct and plan own scientific work with appropriate supervision

IMPERIAL

- To maintain highly organised and accurate record of all findings
- To actively participate in the research programme of the Group
- To publish in high quality journals and to present data at national and international meetings
- To participate in Group research meetings and internal seminars
- To collaborate with other allied scientists within Imperial College and elsewhere in London and abroad, as appropriate
- Assist in the supervision of undergraduate and postgraduate research students and research assistants as required
- To comply with the College, Division, and Unit safety practices and to attend courses on safety when appropriate
- Any other duties as may be deemed reasonable by Head of group as well as Head of Division/Department/Section

Other Duties:

- To undertake any necessary training and/or development
- To undertake appropriate administration tasks
- To attend relevant meetings

Where Imperial or funder conditions necessitate, you will be required to complete timesheets for your work on projects in a timely manner.

Person Specification

Requirements

Candidates/post holders will be expected to demonstrate the following:

**Essential (E)/
Desirable (D)**

Education

Hold A PhD or equivalent level of professional qualifications and/or experience in algebraic geometry or closely related fields (E)

**Candidates who have not yet been officially awarded their PhD will be appointed as Research Assistant.*

Experience

Clear evidence of outstanding promise and originality in research, with a good publication record, commensurate with career stage (E)

Experience of writing research papers (D)

Experience in giving talks at internationally recognised conferences and workshops (D)

Knowledge

A broad and strong background in algebraic geometry (E)

Some teaching experience (D)

Skills & Abilities

Ability to conduct a detailed review of recent literature (E)

IMPERIAL

Ability to develop and apply new concepts	(E)
Creative approach to problem-solving	(E)
Excellent verbal communication skills and the ability to deal with a wide range of people	(E)
Excellent written communication skills and the ability to write clearly and succinctly for publication	(E)
Ability to carry out original research and to produce published research papers	(E)
Ability to identify, develop and apply concepts, techniques and methods in new contexts	(E)
Ability to organise own work independently	(E)
Ability to prioritise own work in response to deadlines	(E)
Ability to keep accurate records of research results and activity	(E)
Ability to direct the work of a small research team and motivate others to produce a high standard of work	(D)
High level analytical capability	(E)
Willingness to work as part of a team and to be open-minded and cooperative	(E)
Flexible attitude towards work	(E)
Discipline and regard for confidentiality and security at all times	(E)
Willingness to undertake any necessary training for the role	(E)
Willingness to travel both within the United Kingdom and abroad to conduct research and attend conferences	(E)
Willingness to work out of normal working hours (including weekends) if the requirements of the project demand	(E)

Further Information

Please note that job descriptions cannot be exhaustive, and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

[Our values](#) are at the root of everything we do and everyone in our community is expected to demonstrate Imperial:

- Respect
- Collaboration
- Excellence
- Integrity
- Innovation

Employees are also required to comply with all Imperial policies and regulations.

We are committed to equality of opportunity, to eliminating discrimination and to creating an inclusive working environment for all. We encourage candidates to apply irrespective of age, disability, marriage or

civil partnership status, pregnancy or maternity, race, religion and belief, gender reassignment, sex, or sexual orientation. You can read more about our commitment [on our webpages](#).

Imperial is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see <https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/>

October 2026