

Physics and Astronomy Fellowships

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Physics and Astronomy



**UK Research
and Innovation**

Fellowships are **funding for individual researchers**. They allow you to **devote time to your own research** and provide support for you to **develop as a research leader**. Fellowships often include career development opportunities like training, mentorship and international placements.



The objectives of the URF programme are to enable **outstanding early career scientists** with **the potential to become leaders in their field** to:

- **Build an independent research career** at a UK university or research institution
- Gain the **freedom, time, and long-term flexible support** to pursue high-quality and innovative lines of scientific research
- **Develop as research leaders** by offering tailored high-quality professional development, networking and engagement opportunities.



Giving **early career scientists** or engineers of **exceptional promise** the **opportunity to conduct research of their own instigation**.

What is a Research Fellowship?

- An **independent research position** held in a university, but (usually) funded by an external body.
- May be a fixed-term post in its own right, or held (on a fixed-term basis) by somebody with a substantive position.
- Some universities offer permanent posts to winners of very prestigious fellowships.
- Details (eligibility, length, permitted hosts etc) **vary wildly between schemes.**
- Applications: find a host then work with them to apply to funder.

Is a Research Fellowship for Me?

- Yes, if you have (and can articulate!) a clear and convincing vision for your own research programme.

Fellowships in Physics and Astronomy

Early-Career/Postdoctoral

- Marie Curie (3)
- Leverhulme Early Career (1)
- Royal Commission 1851 (1)
- UKRI Steven Hawking (1)
- EPSRC Postdoctoral (1)
- RAEng Early Career (0)

European Research Council

- ERC Starting (4)
- Consolidator (1)
- Advanced (3)

Early-Career “Tenure Track”

- RS URF (7)
- RS Dorothy-Hodgekins (2)
- RS Career Development (0)
- STFC Ernest Rutherford (4)
- UKRI Future Leaders Fellowship (5)
- EPSRC Open (1)

Internal/tenure-track

- DKO (Kathleen Ollerenshaw) (~4)
- Presidential Fellowships (2)

- **Royal Society University Research Fellowships (URFs)**
 - - Eligible 3-8 years from PhD
 - - Up to 8 years (!) duration
 - - Very much open to fundamental research: **quality** is what matters.
 - - **Seriously** competitive.
 - Last year 15 applications, 9 progressed to 2nd stage, **3 got to interview**

- **University-funded Fellowships**
 - - Tenure-track fellowships (e.g. DKO Fellowships in Manchester) are at least as desirable and competitive as permanent lectureships.
 - **This year we had 42 applications**

Sift process

Many fellowships have **demand management** (limited places per university), such as ERF (7), FLF (10), RAEng (2) or are limited by Faculty for cost reasons (Leverhulme).

For these, we must have a **sift process** at University, Faculty, School or Department level.

Your RSM will indicate this, and typically a short (1-3 page) **expression of interest** will be reviewed/ranked by relevant group leads.

If you are not supported, you will not be able to apply via Manchester.

Internal Peer Review

UoM policy is for all grant applications to have an internal peer review.

For Fellowships, we recommend at least **two** internal reviewers:

- Head of prospective group or delegated mentor (Science Case)
- Non-domain expert/generalist (Person Case)

Department Head of Research can allocate this.

Group structure

Research Groups

Accelerator Physics (HoG Darren Graham)
Astrophysics (HoG Richard Battye)
Biological Physics (HoG Jian Lu)
Condensed Matter Physics (HoG Andrei Golov)
Nuclear Physics (HoG Kieran Flanagan)
Particle Physics (HoG Andrew Pilkington)
Particle Theory (HoG Jeff Forshaw)
Photon Physics (HoG Mark Dickinson)
Fluids & Soft Matter Physics (HoG Anne Juel)
Theory Group (HoG Ahsan Nazir)

Institutes

Cockcroft @ Daresbury
Director: Stewart Boogart
Jodrell Bank Centre for Astrophysics
Director: Keith Grange
National Graphene Institute
Director: Vladimir Falko
Photon Science Institute
Director: Mark Dickinson

*Others beyond P&A:
MIB, Dalton Cumbria, UoM@Harwell,
Royce, GEIC, The Christie, etc.*

Fellowship opportunities

Accelerate your research career with an independent fellowship in Physics and Astronomy at Manchester



Department of Physics and Astronomy / Research / Fellowship

Department of Physics and Astronomy

Research

Themes

Areas of expertise

Centres and Institutes

Facilities

Impact

Postgraduate research

Fellowship

Why choose The University of Manchester for your fellowship?

We help fellows build long-term careers in Physics or Astronomy. Here, at The University of Manchester you can shape your work with some of the world's brightest minds, using world-class facilities. You'll also benefit from our collaborative and supportive culture, designed to nurture your talent.

We're known for our research excellence, and we boast the cutting-edge equipment, communities of experts, and transparent development structures to propel you into a successful research career.

Our support extends to a variety of funding schemes, including [grants offered by the Royal Society for university research fellowships](#).

In advance of the funder deadline, express your interest in applying for a fellowship with our Physics and Astronomy Department.

Expression of Interest

Insights from our researchers: Choosing

www.physics.Manchester.ac.uk/research/fellowship/ or physics-fellowships@Manchester.ac.uk

My Personal Fellowship Experience

2005 – PhD

2006-2010 – Postdocs (x 3)

2010 – Applied for STFC, RS and EPSRC Fellowships

2011 – EPSRC Career Acceleration Fellowship
awarded

2011 – Lecturer at Manchester

2019 – Senior Lecturer

2023 – Reader

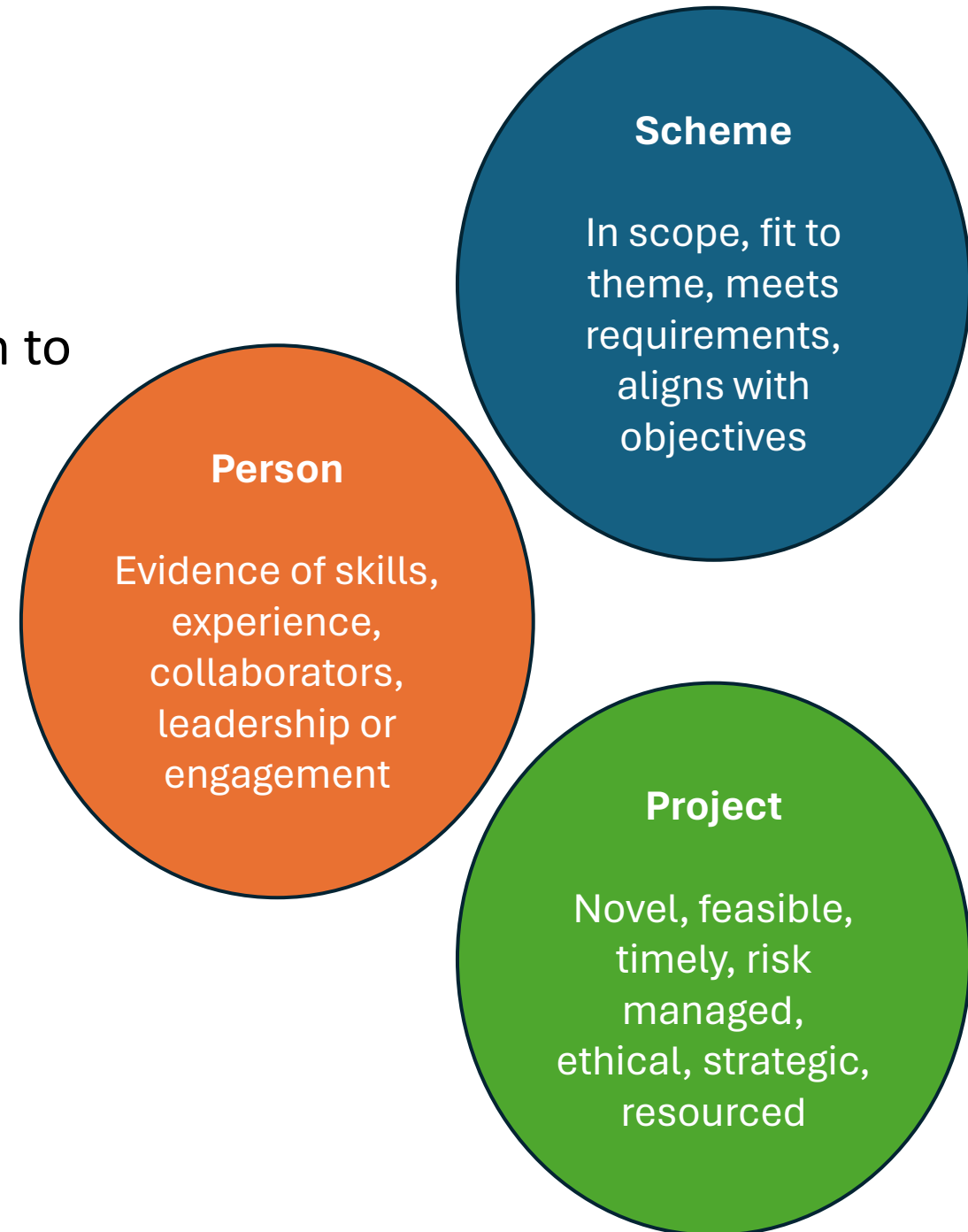
2024 – Department Head of Research

Successful Applications?

- Most schemes are very competitive and there is **no recipe for success**.
- Schemes vary greatly and you need to pay attention to one you are applying for.

Two top tips:

- - It is never too soon to prepare “yourself” for an application
- - It is more about the person than the project.



Holding Fellowships in Manchester

- Our Department can host most kinds of fellowships.
- Can provide **extensive support with applying** e.g. (internal feedback from experienced applicants, mock interviews).
- Alex and Frank will describe the processes.
- But to start with, **talk to us!**