



Astronomy Large Award Research Grant Application Guidelines – 2024

Introduction

The purpose of these notes is to provide guidance and instructions to Applicants when preparing a Large Award full application for consideration by the peer review panel. They are intended to supplement the information available in the [Research Grants Handbook](#).

The notes provide guidance on the following:

1. Eligibility to Apply to the 2024 Large Awards Opportunity
2. Aims of the Scheme
3. Large Award Remit
4. Timetable
5. How to Apply
6. Required Information
7. Large Awards Resources
8. How will we assess your application – Peer Review
9. Additional Information

1. Eligibility to Apply to the 2024 Large Award opportunity

This funding opportunity is only open if you submitted an expression of interest (EOI) and have subsequently been shortlisted and invited to submit a full proposal. Any uninvited proposals will be rejected.

You are not permitted to vary costs or FTE by 10% up or down from those submitted in your EOI.

You are not permitted to change the team (unless in exceptional circumstances) from the team submitted in your EOI.

You may amend costs within the headings submitted in your EOI, but the overall total may not vary by 10%.

Applications which do not follow this rule will be rejected at the submission stage.

You must submit your application for the same funding duration as requested in your EOI.

2. Aims of the Large Award scheme

The specific aims of the scheme are to:

- Provide an opportunity to apply for science-themed programmatic proposals, with the aim of providing a concerted and coordinated effort to address a specific research area or technology development.
- Ensure that the programme supported is scientifically excellent and is clearly in line with stated Council strategic science objectives.
- Consider the strategic objectives of the UK Space Agency, address the impact agenda and be responsive to changes and new ideas.
- Ensure that the process is transparent and accountable, particularly with respect to the means of prioritisation.
- Ensure that the outcome, where appropriate, takes account of the Council's and the UK

Space Agency's current and planned investment in facilities.

3. Large Award Remit

The Astronomy Large Awards Panel will assess and provide recommendations to the STFC Executive and the Science Programme Advisory Committee (SPAC) of the UK Space Agency (UKSA), under the dual key arrangement, on all responsive research grant applications in astronomy and space science covering basic research, exploitation, theory and modelling, and the development of basic ('blue skies') technology (within TRL 1-4) related to the programme.

The Astronomy Large Awards Panel will comprise expertise to cover the science areas invited to submit to the full Large Award closing date. The Panel will consist of existing Astronomy Grants Panel (AGP) membership, with additional members as required.

Details of the Astronomy Grants Panel membership can be found here: [Astronomy Grants Panel – UKRI](#)

Research Remit of Large Awards

If you have been invited to submit a full application your application is in one or more of the astronomy observation, astronomy theory, solar system and planetary studies remits which include:

- Stellar physics, including star formation and extra-solar planetary systems (studies of the Sun as part of a programme of stellar physics may fit here).
- Studies of transient phenomena.
- The interstellar medium and galactic astronomy.
- Extra-galactic astronomy and cosmology.
- The astrophysical aspects of particle astrophysics, where particle astrophysics includes dark matter, the origin of cosmic rays and gravity.
- Laboratory astrophysics, including software development, relevant to the above programmes.
- Solar physics and heliospheric physics
- Space-based terrestrial magnetospheric science and fundamental space plasma physics (excluding the impact on the Earth's neutral atmosphere)
- Planetary science, including the surfaces and interiors, atmospheres, ionospheres, and magnetospheres of the solar system bodies other than the Earth.
- Laboratory studies of solar system material such as meteorites, returned samples, solar system analogues, other laboratory physics relevant to the area of the call and related software development.
- Blue skies technology/instrumentation development applicable to the above areas (within TRL 1-4).

Technology Development – STFC will consider funding astronomy and space science applications within technology readiness levels (TRL) 1 – 4 or their equivalent ([Eligibility of technology readiness levels \(TRL\) – UKRI](#)). Applications which plan to exceed TRL 4 in the timeline of the award will be considered out of remit. Modest upgrades to existing equipment, related to the delivery of science within the course of the project requested, may be considered. The UKSA will consider space mission-related applications at TRL 5 and above.

Telescope/instrument operations costs, where not directly linked to specific science outcomes from the proposed work within the grant period, are not within the remit.

Gravitational Wave Research – Astronomy Large Awards will consider support for some aspects of gravitational wave research: [Clarification of STFC Support for Gravitational Waves Research – UKRI](#)

Space Weather and the Impact of the Sun on Terrestrial Systems – STFC will support non-Earth-orientated solar-terrestrial physics research e.g., fundamental space plasma physics not related to the Earth. STFC will also fund space-based facilities (spacecraft, instruments and operations) for solar terrestrial physics and their associated primary exploitation.

NERC is responsible for funding solar terrestrial physics where the primary goal is to understand the Earth’s environment from the deep interior to the upper atmosphere (i.e., mesosphere, thermosphere and ionosphere).

Mars Exploration and Sample Return - Studies related to the UKSA’s programme of Aurora science (Mars exploration and sample return) should be addressed to the UKSA (SpaceExploration@ukspaceagency.gov.uk) in the first instance, as separate funding may be available.

4. Timetable

Date:	Action:
12 March 2024	Deadline for submission of Large Award applications by 4pm
April/May	Expert Peer Review
June	Applicants to respond to reviewer comments
September	Peer Review Panel Meeting
October	Science Board and UK Space Agency endorsement
November	Outcome Announced

5. How to Apply

We are running this funding opportunity on the new UKRI Funding Service. You cannot apply on the Joint Electronic Submissions (Je-S) system.

The project lead is responsible for completing the application process on the UKRI Funding Service, but we expect all team members and project partners to contribute to the development of the application.

If you are submitting as a multiple-organisation consortium, only the lead research organisation can submit an application to UKRI. Please see the ‘how to apply’ section on the funding finder for full details on how to submit an application via the UKRI Funding Service.

Please be advised the UKRI Funding Service does not permit returns for amendment; if you fail to follow the format and guidance (outlined here and in the funding finder page) your application will be rejected and will not be considered further for funding in this round.

6. Required Information

The UKRI Funding Service requests information in a box/question set format. You will need to provide the following:

Vision and Approach (previously known as Case for Support) – **PDF 12 pages**

Create a single PDF document that includes your responses to the following criteria. The document must not exceed 12 sides of A4, single space paper in 11 point Arial (regular) font (or equivalent sans serif font). You may include images, graphs and tables as required.

DO NOT INCLUDE REFERENCES IN THIS DOCUMENT, THERE IS A SEPARATE SECTION FOR THIS INFORMATION.

Please see the UKRI funding finder for further details on document size/how to upload.

In this section you should address what you are hoping to achieve and how you will deliver the proposed work?

For **Vision**, explain how your proposed work:

- Is of excellent quality and it's importance within or beyond the field(s) or area(s)
- Has the potential to advance current understanding, generates new knowledge, thinking or discovery within or beyond that field or area
- Is timely, given current trends, context and needs
- Impacts world-leading research, the society, the economy or environment
- Identify the potential direct or indirect benefits and who the beneficiaries might be

For the **Approach**, explain how you have designed your work so that it:

- Is effective and appropriate to achieve your objectives
- Is feasible
- Uses a clear and transparent methodology
- If applicable, summarises the previous work and describes how this will be built upon and progressed
- Will maximise translation of outputs into outcomes and impacts
- Describes how your, and if applicable, your team's research, research environment (in terms of the place, and relevance of the project) will contribute to the success of the work.

You should also provide in this section:

- A detailed and comprehensive project plan, including milestones and timelines in the form of a Gantt chart or similar

Applicant and team capability to deliver (word limit: 1,500)

Why are you the right individual or team to successfully deliver the proposed work?

Evidence of how you and your team have:

- The relevant experience (appropriate to career stage) to deliver the proposed work
- The right balance of skills, and expertise to cover the proposed work
- The appropriate leadership and management skills to deliver the work and your approach to develop others
- Contributed to developing a positive research environment and wider community

The word count is 1,500 words, 1000 words to be used for R4RI modules and, if necessary, a further 500 words for Additions.

Use the Résumé for Research and Innovation (R4RI) format to showcase the range of relevant skills you and, if relevant, your team (project and project co-leads, researchers, technicians, specialists, partners and so on) have and how this will help deliver the proposed work. You can include individuals' specific achievements but only choose past contributions that best evidence their ability to deliver this work.

Complete this section using the R4RI module headings listed. Use each heading once and include a response for the whole team, see the [UKRI guidance on R4RI](#). You should consider how to balance your answer, and emphasize where appropriate the key skills each team member brings:

- contributions to the generation of new ideas, tools, methodologies, or knowledge
- the development of others and maintenance of effective working relationships
- contributions to the wider research and innovation community
- contributions to broader research or innovation users and audiences and towards wider societal benefit

Additions

Provide any further details relevant to your application. This section is optional and can be up to 500 words. You should not use it to describe additional skills, experiences, or outputs, but you can use it to describe any factors that provide context for the rest of your R4RI (for example, details of career breaks if you wish to disclose them).

Complete this as a narrative. Do not format it like a CV.

UKRI has introduced new role types for funding opportunities being run on the new UKRI Funding Service.

Risk Management (word limit: 1000)

What risks are involved in the programme of work and how will these be mitigated?

Resource and cost justification (word limit: 2000)

What will you need to deliver your proposed work and how much will it cost?

Please follow the STFC guidance [Case for support – justification of resources – UKRI](#). Please note this guidance refers to Je-S but the costs you can apply for remain the same within the funding service.

Ethics and responsible research innovation (word limit: 500)

What are the ethical or RRI implications and issues relating to the proposed work? If you do not think that the proposed work raises any ethical or RRI issues, explain why.

Applicants are also expected to consider [UKRI's trusted research and innovation programme](#). You will be required to answer the following three questions:

- a) Does the research in this application related to any of the 17 sensitive areas of the economy identified in the NS&I Act?
- b) Does the research in this application include international collaboration?
- c) Is this application part of an experiment at an international facility?

Other existing support (word limit: 2000)

Please provide details of support sought or received from any other source for this research or research in the same field.

Under no circumstances should applicants receive duplicate funding for the same or similar proposal from more than one funding agency. We cannot prohibit the submission of the same or similar proposals to other funding agencies (outside of UK Research and Innovation (UKRI)), but you must include details of any such proposals that have been submitted.

Project Partners

Add details about any project partners' contributions. If there are no project partners, you can indicate this on the Funding Service. A project partner is a collaborating organisation who will have an integral role in the proposed research. This may include direct (cash) or indirect (in-kind) contributions such as expertise, staff time or use of facilities. You will not be able to provide a letter of support.

Data management and sharing (word limit: 1000)

How will you manage and share data collected or acquired through the proposed research?

Provide a data management plan that clearly details how you will comply with UKRI's published [data sharing policy](#), which includes detailed guidance notes.

Please see the [Data management plan – UKRI](#) guidance provided by STFC.

Facilities (word limit: 500)

Does your proposed research require the support and use of a facility?

If not, enter N/A into the text box and mark this section as complete. If you will need to use a facility, follow your proposed facility's normal access request procedures. Ensure you have prior agreement so that if you are offered funding, they will support the use of their facility on your project.

References (word limit: 1500)

List the references you have used to support your application.

Other mandatory information/boxes you will be required to complete:

- Research involving the use of animals
- Conducting research with animals overseas

7. Large Awards Resources

The AGP considers applications which are wide-ranging in the level of resources requested, and expect to see specific, explicit and compelling justification for all requests. The AGP will consider different levels of request but lack of compelling justification will have a negative impact on the assessment of the application.

You are not permitted to change the team (unless in exceptional circumstances) from the team submitted in your EOI.

You may amend costs within the headings submitted in your EOI, but the overall total may not vary by 10%.

Large awards must be a minimum of 3 years and a maximum of 5 years in duration. You must submit the same duration in your full application as submitted in your expression of interest. All awards must start on 1 April 2025.

UK Research and Innovation (UKRI) has introduced new role types for funding opportunities being run on the new UKRI Funding Service.

Find out more about: [roles in funding applications: eligibility, responsibilities and costings guidance](#).

Large awards must follow the guidance below:

- between 9 and 25 years of research and innovation associate (previously referred to as postdoctoral research assistant (PDRA)) effort in total. The panel recognises that technical or lab-based projects may require fractions of the time of specialist research and innovation associates, but this should not exceed the overall full time equivalent (FTE) limits
- applicant FTE (the values below are suggested for guidance. You are permitted to request the FTE you require to carry out the proposed research and should ensure it is explicitly justified):
 - 5 to 10% where you have a clear and significant, but not major, personal role in the research

- 10 to 20% where you are leading a work package (or equivalent) or are heavily involved in the research at a personal level
- applicants managing a PDRA are expected to request a minimum of 10%. Please ensure such management roles are clearly identified
- technician time

Applicants who are not requesting a salary contribution may request support costs such as travel and subsistence or other directly incurred costs. You must make it clear whether estates and indirect costs will be included in the request.

If requesting un-named research staff and named research staff, please refer to the grants handbook (**staff and investigator costs**).

If requesting technical and other staff, please refer to the grants handbook (**other staff**).

You can also request and make the case for the following project-specific costs:

- [travel and subsistence](#)
- [directly incurred](#)
- [directly allocated other costs](#)
- [equipment](#)

The research organisation is expected to provide standard laptops or desktops from indirect costs.

Laptops/desktops may only be costed to the application where a higher specification is required for the completion of specific grant-related activities such as data modelling, enhanced graphics and more.

Computing officer support and administrative support can be requested, but must be fully justified and be providing project-specific support. The applicants should clearly explain why such support cannot be provided from indirect costs.

Studentship posts are not permitted on large awards.

We encourage you to follow the principles of the **Concordat to Support the Career Development of Researchers** and the **Technician Commitment**.

International collaboration

If your application includes international **project partners** or collaborators, visit **UKRI's trusted research and innovation** for more information on effective international collaboration.

8. How will we assess your application – Peer Review

STFC is committed to the UKRI [Principles of Peer Review](#) throughout our assessment and decision-making processes. The Large Awards assessment criteria are outlined below and detailed on the funding finder page and on the UKRI funding service:

- Vision
- Approach

- Applicant and team capability to Deliver
- Justification of resources
- Risk management
- Ethics and response research innovation

Applicants submitting to the STFC must provide a full ethics statement that confirms that proper consideration has been given to any ethics issues raised. If the statement does not adequately address these issues, this could lead to the rejection of a proposal, or the award of a conditional grant to ensure the necessary ethical considerations and ethical review are undertaken. In rare occasions, concerns around ethical considerations may mean that you deem a proposal to be unfundable.

Reviewer Comments

We will invite 3-5 UK and international experts to review your application. We will require a minimum of 3 reviewers to submit comments on your application. You will then be given the opportunity to respond to comments.

Applicant response to Reviewer comments

Applicants will be given the opportunity to see and respond to Reviewer comments via the UKRI Funding Service. The limit for a response is a maximum of 500 words per review received. Applicants are strongly advised to be clear and concise in their responses.

The responses should be returned within 10 working days of receipt.

Peer Review Meetings

The AGP is a peer review assessment Panel. A sub-set of the AGP, with additional expertise brought in as required, will sit as a single panel to consider the Large Awards applications. It will take into account documents provided in the application, as well as the reviewer comments and the applicant response to reviewer comments, in its assessment of your application. The AGP will also take into account whether the applicants have addressed any feedback from the sifting stage.

The Panel will not descope applications at the assessment stage. Applications will be scored and ranked in their entirety.

The AGP comprises four Sub-Panels of experts covering the following four broad science areas within Astronomy:

AGP: AO - Astronomy Observations (including technology expertise)

AGP: AT – Astronomy Theory

AGP: SS – Solar Studies & Space-based Solar Terrestrial Physics

AGP: PL – Planetary Studies

Details of the full AGP Panel membership can be found at [AGP Panel Members](#)

The AGP is committed to support the recommendations and principles set out by the [San Francisco Declaration on Research Assessment](#) (DORA). We do not use journal-based metrics, such as journal impact factors, as a surrogate measure of the quality of individual research articles when assessing proposals.

Post-meetings / Communicating Outcomes

The AGP Chair will report to STFC Science Board and to the UKSA on the recommended outcome for

the round. The final funding line will be determined by the STFC budget holder, at which point Applicants will be informed of the outcome with appropriate feedback. We aim to communicate outcomes and provide feedback in November.

Future Submissions to the Large Award Scheme

If you are unsuccessful in securing funding as either PI or Co-I in the 2024 Large Award round you will not be eligible to apply to the 2025 Large Award round. You would next be eligible to submit as a PI or Co-I to the 2026 Large Award round.

If you are successful in securing funding as either a PI or Co-I in the 2024 Large Award round then you cannot apply again for a Large Award whilst funding is ongoing (you cannot apply for overlapping Large awards, not taking into consideration no cost extensions)

9. Additional information

Contacts

Senior Programme Manager - Chloe.Woodcock@stfc.ukri.org

Head of Astronomy Awards – Kim.Burchell@stfc.ukri.org

Useful Links

[Peer review and assessment](#)

[Equality and Diversity](#)

[Researchfish - Reporting Outcomes](#)

[Impact Guidance](#)