

# Astronomy Small Award Research Grant Application Guidelines – 2024

#### Introduction

The purpose of these notes is to provide guidance and instructions to Applicants when preparing a Small Award application for consideration by the Astronomy Grants Panel (AGP). 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 Small Awards Round
- 2. Aims of the Scheme
- 3. Small Award Remit
- 4. Timetable
- 5. Applying through the UKRI Funding Service
- 6. Small Award Scope and Requesting Resources
- 7. Required information and structure
- 8. How will we assess your application Peer Review
- 9. Additional Information

# 1. Eligibility to Apply to the 2024 Small Awards Round

Applicants may submit up to two applications to the Small Award round, only one of which can be as the Project Lead (previously principal investigator), subject to the 2024 eligibility for PLs. Applicants must adhere to the FTE limits as per the guidance in section 4.

Applicants are eligible to apply as a PL to the Small Award scheme in 2024 if they satisfy one of the following criteria:

- o The Applicant applied to the 2021 consolidated/consortium grant round and would be due to submit in 2024.
- The Applicant requested a slippage to their consolidated grant submission year and is due to apply in 2024.
- o The Applicant was eligible to submit to the 2023 round but chose not to
- The Applicant is a newly appointed Academic member of staff who has joined a department between Consolidated or Consortium submissions.
- The Applicant was unable to apply with their group's last Consolidated or Consortium submission (e.g. due to extenuating circumstances such as maternity leave, parental leave, caring leave, etc). \*

Applicants who are eligible to submit as PL in 2024 are **not required** to submit an application in this round. They may choose to submit to a later round. If you are unsure of your eligibility to apply please contact the STFC Office (kim.burchell@stfc.ukri.org and chloe.woodcock@stfc.ukri.org)

Project Co-Lead (previously Co-Investigator) eligibility is open to all applicants, providing the Project Lead is eligible to apply as per the conditions above. All applicants must also meet the general applicant eligibility criteria and check the guidance which can be found in the <a href="Research Grants">Research Grants</a> Handbook.

Applications to the Small Award scheme are welcome from both single research organisations or multiple research organisation consortiums. Please note if you are submitting as a consortium, only the overall lead can submit an application on the new funding service.

Applicants should note that the Small Award and Large Award schemes are decoupled; a submission to either scheme will not affect the eligibility to apply to the other.

## 2. Aims of the Small Award scheme

The specific aims of the scheme are to:

- 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.
- Ensure that there is an appropriate balance between observations, instrumentation, and theory and between the various sub-disciplines of astronomy and the development of novel, generic technologies for astronomy and space science, consistent with the overall strategy of Council and the UK Space Agency.

#### 3. Small Award Remit

The Astronomy Grants Panel (AGP) 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 (TRL 1-4) related to the programme.

The AGP will comprise experts to cover all science areas of the programme and provide an overview of the process and programme to ensure support is provided to research of the highest quality across the science programme. Sub-Panels of appropriate experts from the AGP will meet to assess elements of each proposal that fall within their remit and to provide input to the overall recommendation. The remit of each Sub-Panel is given in the details of the calls described below and should be referred to prior to submitting an application. The AGP will review the output of the meetings and draw up final recommendations to be submitted to the Science Board (SB) and to UKSA SPAC.

#### **Research Remit of Small Awards**

The AGP offers two opportunities for small award applications. The same deadline applies to both. The remits of these opportunities are set out below: if Applicants have any doubt about which opportunity a particular application should be submitted to, they are <u>strongly encouraged</u> to discuss this with the STFC Office as soon as possible. Applications judged by the Panel to be submitted to the wrong opportunity will be **REJECTED**.

Applicants are advised that the new UK Research and Innovation (UKRI) funding service does not have the functionality to return for amendment. If you do not follow the remit guidance, submit to

the wrong opportunity, or fail to follow the page limits/FTE rules, your application will be rejected and you will not be able to submit a revised version to the 2024 opportunity.

Applicants can submit a maximum of two applications per round (spanning both opportunity remits); only one can be as the Project Lead (subject to the 2024 project lead eligibility criteria listed above).

#### Astronomy Observation (AO) and Astronomy Theory (AT) Opportunity

This opportunity covers theory, including modelling, simulation and related software development, observation, experiment and new technology research, relevant to all aspects of astronomy and astrophysics beyond the solar system. This includes:

- 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.
- Blue skies technology/instrumentation development applicable to the above areas (TRL 1-4).
- Laboratory astrophysics, including software development, relevant to the above programmes.

## Solar Studies (SS) and Planetary Studies (PL) Opportunity

This opportunity covers theory, including modelling, simulation and related software development, observation, experiment and new technology research, relevant to all aspects of solar system science. This includes:

- 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.
- Studies of other solar system bodies including comets, asteroids, meteorites, etc.
- 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 (TRL 1-4).

If your application is in one of the following research areas we strongly advise you contact the STFC Office to check the remit ahead of submitting:

**Technology Development** - The AGP will consider funding astronomy and space science applications within technology readiness levels (TRL) 1 to 4 or their equivalent (<u>Eligibility of technology readiness levels (TRL) – UKRI</u>). Applications which seek to move from TRL 4 to TRL 5 during the timeline of the proposed award are out of remit. Modest upgrades to existing equipment, related to the delivery of science within the course of the project requested, may be considered. Telescope/instrument operations costs, where not directly linked to specific science outcomes within the grant period, are not within the remit.

The UKSA will consider space mission-related applications at TRL 5 and above.

**Gravitational Wave Research -** The AGP will consider funding 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 <a href="mailto:spaxeexploration@ukspaceagency.gov.uk">spaxeexploration@ukspaceagency.gov.uk</a>) in the first instance, as separate funding may be available.

#### 4. Timetable

Date:	Action:
12 <sup>th</sup> March (4pm)	Deadline for submission of Small Award applications
April/May	Expert Peer Review
June	Applicants to respond to reviewer comments
September	Peer Review Panel Meetings
October	Science Board and UK Space Agency endorsement
November	Outcome Announced

#### 5. Applying through the UKRI Funding Service

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

Please see the detailed 'how to apply' guidance available on the funding finder page. Further guidance on the UKRI Funding Service is also available at the following link: <a href="How applicants use the UKRI Funding Service">How applicants use the UKRI Funding Service</a> — UKRI.

If you are submitting as a multiple organisation consortium, only the lead research organisation can submit an application to UKRI.

# **6. Small Award Scope and Requesting Resources**

The AGP considers applications which are wide-ranging in the level of resources requested, and would 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 proposal, and may lead to an application being **REJECTED**.

Applicants are advised we will no longer be providing a suggested guideline cost for PDRA/Applicant/visiting researcher travel, computing, secretarial or computing support. Applicants can still request these costs but should consult the links provided below and request/justify what is required to support the project.

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

Applications to the Small Awards opportunity must contain a single project (requests for multiproject small awards will be rejected) which must follow the resource guidance below:

- o 3 years maximum in duration, all awards must start on 01/04/2025.
- Maximum of 1FTE of research and innovation associate (previously PDRA) effort. (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 envelope of one FTE effort per project.)
- Maximum 0.20FTE of Applicant time, with the project lead (PL) expected to request a minimum of 0.10FTE to lead and manage the project. Please note the 20% cap includes applicants contributing at zero salary. You are not permitted to include additional applicants over the 20% cap even if they are working at zero cost.
- There may also occasionally be projects which involve only applicant only time or applicant plus technician time.

It is the Applicants' responsibility to demonstrate to the Panel that the programme to be carried out in the Small Award is clearly distinct from existing support.

## **Requesting Staff Posts**

Applicant Time (FTE) – please refer to the research grants handbook Investigator posts – UKRI

- The PL would be expected to request a minimum of 0.10 FTE for scientific contribution, oversight of the project and management of any personnel involved.
- An Applicant is NOT permitted to request more than 0.20 FTE (costed or uncosted) within the round.

#### Requesting Applicant time but with zero salary costs

Applicants who are not requesting a salary contribution may request support costs such as travel/subsistence or other directly incurred costs. Applicants **MUST** make it clear whether Estates and Indirect costs have been included in the request.

**Requesting Un-named Research Staff and Named Research Staff (PDRA posts)** – please refer to the Grants handbook Research Staff.

**Technical and Other Staff** – please refer to the Grants handbook (Other staff – UKRI)

Please note that requests for studentships are not eligible within the Small Awards Scheme.

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

- Travel and Subsistence (Travel and subsistence UKRI)
- Directly Incurred (Other costs UKRI)
- Directly Allocated Other Costs (<u>Other costs UKRI</u>)
- Equipment (<u>Equipment UKRI</u>)

The Research Organisation is expected to provide standard laptop or desktops from Indirect costs. Laptops may only be costed to the application where a higher specification of laptop is required for the completion of specific grant-related activities such as data modelling, enhanced graphics, etc.

## 7. Required Information and Structure

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 3 pages

Create a single PDF document that includes your responses to the following criteria. The document must not exceed 3 sides of A4, single space paper in 11point Arial format (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 its 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 word-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 can 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 emphasise 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 entire section as a narrative. Do not format it like a CV.

## Risk Management (word limit: 500)

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

## Resource and cost justification (word limit: 1000)

What will you need to deliver your proposed work and how much will it cost? Please follow the STFC guidance <u>Case for support – justification of resources – UKRI</u> (please note that although this document refers to JeS, the content required is still relevant to the UKRI Funding Service system).

# Ethics and responsible research and innovation (RRI) (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.

## Other existing support (word limit: 2000)

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

Under no circumstances should applicants receive duplicate funding for the same or a 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 UKRI), but you must include details of similar 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 <u>data sharing policy</u>, which includes detailed guidance notes.

Please see the Data management plan – UKRI guidance provided by STFC(please note this document

refers to JeS, the content required is still relevant to the UKRI Funding Service system)

#### Facilities (word limit: 1000)

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. You should only complete this box if you are requesting support to access the facility.

# References (word limit: 1000)

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
- Trusted research and innovation

Failure to comply with the requested information/format and page limits will result in the proposal being rejected.

# 8. How will we assess your application - Peer Review

STFC is committed to the UKRI <u>Principles of Peer Review</u> throughout our assessment and decision-making processes.

The AGP Small Award assessment criteria are as follows (please be advised the first three categories have the higher weighting in the assessment process):

- Vision
- Approach
- Applicant and team capability to deliver
- Justification of resources
- Risk management
- Ethics and responsible research and innovation (RRI)

# **Reviewer Comments**

We will invite two to three UK and international experts to review 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 word 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 via the UKRI funding service within 10 working days of receipt.

## **Peer Review Meetings**

The AGP is a peer review assessment Panel. It will consider the information provided in the application, as well as the reviewer comments and any PI responses to reviewer comments, in its assessment of your application.

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

AGP: AO - Astronomy Observations

AGP: AT – Astronomy Theory

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

AGP: PL – Planetary Studies

In addition, a Technology Sub-Panel provides expertise to the AGP to appropriately tension technology and exploitation/theory projects. Details of Panel membership can be found at <a href="AGP Panel">AGP Panel</a> Members

The AGP is committed to supporting the recommendations and principles set out by the <u>San</u> <u>Francisco Declaration on Research Assessment</u> (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, after which Applicants will be informed of the outcome with appropriate feedback. We aim to communicate outcomes and provide feedback by November.

## **Future Submissions to the Small Award Scheme**

If you are unsuccessful applying as a project lead in the 2024 Small Award round you will not be eligible to apply to the 2025 Small Award round as a project lead. You would next be eligible to submit as a PI to the 2026 Small Award round.

If you are successful in securing funding as a PI in the 2024 Small Award round then you cannot apply again for a Small Award as project lead for funding which would overlap your award (not taking into consideration no cost extensions).

If your application was unsuccessful in securing funding, we will not permit the same application to be submitted in the subsequent year with different applicant roles assigned (e.g., a role reversal between project lead and project co-lead).

# 9. Additional information

### **Contacts**

Senior Programme Manager, Astronomy Awards - <u>Chloe.Woodcock@stfc.ukri.org</u>
Head of Astronomy Awards - <u>Kim.Burchell@stfc.ukri.org</u>
Programme Manager, Astronomy Awards - <u>justyna.misior@stfc.ukri.org</u>

#### **Useful Links**

Peer review and assessment
Equality and Diversity
Researchfish - Reporting Outcomes

**Impact Guidance** 

# Annex 1 - Timeline for Submissions to Small and Large Awards

# Timeline for Phased Submission to Small Awards and Large Award opportunities

