

National Aeronautics and  
Space Administration



# EXPLORE SOLAR SYSTEM & BEYOND

## NASA Headquarters Update

ExoPAG #28 | October 1, 2023

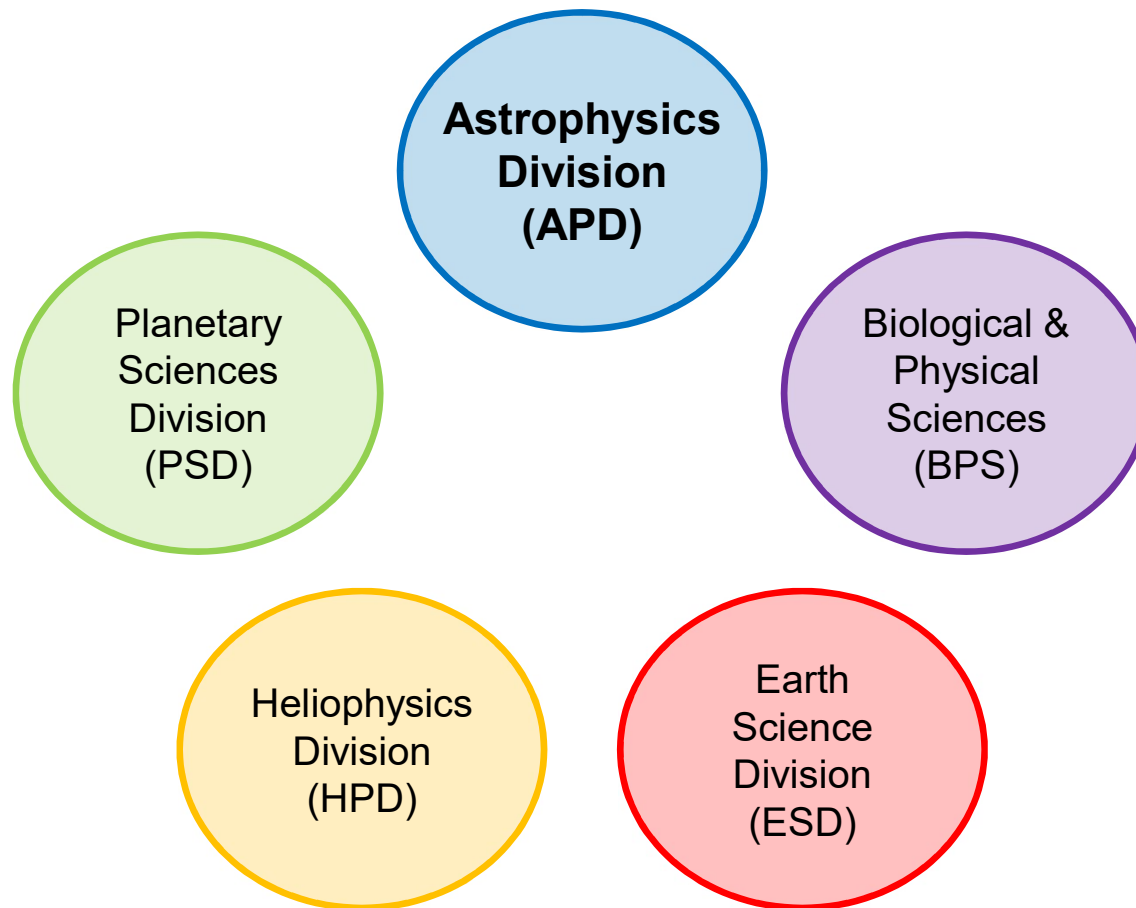
**Joshua Pepper** ([joshua.a.pepper@nasa.gov](mailto:joshua.a.pepper@nasa.gov))  
Exoplanet Exploration Deputy Program Scientist  
Astrophysics Division, Science Mission Directorate



# An Overview of NASA and the ExoPAG

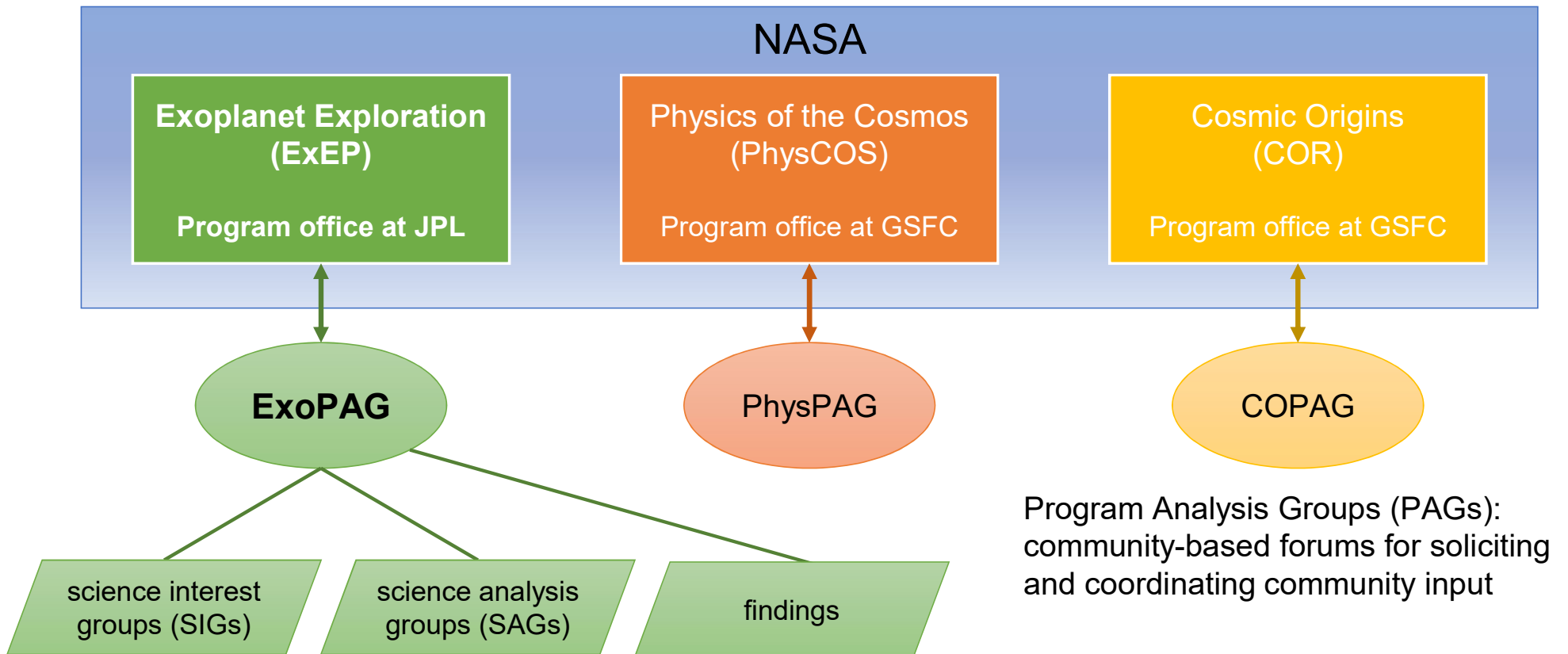


# NASA Science Mission Directorate (SMD)





# NASA Astrophysics Division (APD) Focused Programs



More about the ExoPAG: <https://exoplanets.nasa.gov/exep/exopag/overview>



# ExoPAG Executive Committee

<https://exoplanets.nasa.gov/exep/exopag/overview>

- The ExoPAG is led by a Chair appointed from the exoplanet community to serve a 3-year term.
- The ExoPAG Chair is supported by a 10-12-member Executive Committee (EC)
  - EC members are selected to reflect a cross-section of the exoplanet exploration stakeholder community;
  - EC members are solicited annually and appointed to rotating 3-year terms.
- Together, the ExoPAG Chair and EC comprise a steering group that is responsible for keeping the community informed of ongoing activities and opportunities within the ExoPAG, capturing and organizing community input, and overseeing ExoPAG analyses.
- Service on the EC provides an excellent opportunity to:
  - Initiate a Science Analysis/Interest Group.
  - Review and contribute to the ExEP Science and Technology Development Gap Lists.
  - Contribute to APD's efforts to increase diversity, equity, and inclusion at NASA and in the community.
  - Interact with excellent colleagues.
  - Inspire the next generation.
  - Have an impact within our community.

# The ExoPAG Executive Committee

Name	Home Institution
<b>Ilaria Pascucci (Chair)</b>	Univ. Arizona
Michael Meyer (past chair)	Univ. of Michigan
Michael Bottom	Univ. Hawaii
Ofer Cohen	Univ. Mass. Lowell
Knicole Colón	NASA GSFC
Ian Crossfield	Univ. of Kansas
Diana Dragomir	Univ. of New Mexico
Kate Follette	Amherst College
Natalie Hinkel	Louisiana State Univ.
Samson Johnson	JPL
Erin May	JHU Applied Physics Lab
Bertrand Mennesson	JPL
Malena Rice	Yale Univ.
Lily Zhao	Flatiron Institute

## Programmatic Support:

- Hannah Jang-Condell, NASA HQ – Executive Secretary, NASA POC
- Megan Ansdell, NASA HQ – Planetary Science Division Liaison
- Richard Eckman, NASA HQ – Earth Science Division Liaison
- Galen Fowler, NASA HQ – Heliophysics Division Liaison
- Exoplanet Exploration Program Office, JPL - Logistics



## Join the ExoPAG EC!

NASA anticipates making new appointments to the ExoPAG EC, replacing current members of the committee who have reached the end of their appointments. New appointments will start in the Spring of 2024 and will be for a period of three years.

See the recruitment letter for more details:

[https://exoplanets.nasa.gov/internal\\_resources/2540/](https://exoplanets.nasa.gov/internal_resources/2540/)

The deadline for nominations is expected to be in February, 2024.

Questions?

Contact Hannah Jang-Condell ([hannah.jang-condell@nasa.gov](mailto:hannah.jang-condell@nasa.gov))



# NASA HQ Update





# NASA HQ Personnel



Douglas Hudgins  
ExEP Program Scientist



Hannah Jang-Condell  
ExEP Associate Program Scientist  
ExoPAG Executive Secretary



Joshua Pepper  
ExEP Deputy Program Scientist



Megan Ansdell  
ExEP Planetary Science Division Liaison



Lucas Pagannini  
ExEP Program Executive

# New Senior Scientist for Astrobiology Strategy (SSAS)

Expand the astrobiology program within NASA and beyond.

- Increased cross-divisional & cross-directorate activity in Astrobiology at NASA (Remedy “siloing”)
- Interagency programs (NSF, USGS, NIH...)
- Revitalized international connections & collaborations
- Public/private partnerships
- Role in missions
- Post discovery planning: communication strategy, science strategy



David Grinspoon



Lindsay Hays

New Astrobiology Program Scientist  
- Managing most existing Astrobiology research programs.



# Exoplanets in NASA Astrophysics Research and Analysis

Including:

D.10 TESS General Investigator

D.14 Roman Mission Research and Support Participation Opportunities

D.16 Astrophysics Decadal Survey Precursor Science

D.18 Extreme Precision Radial Velocity Foundation Science

More also in PSD

Also cross-divisional, like Exoplanets Research Program (XRP)



# NASA Astrophysics Statement of Principles

## **Purpose of this Statement of Principles:**

The purpose of the Statement of Principles is to help NASA Astrophysics carry out community best practices to create an inclusive work environment. This document is not intended to nor can be a legal document, but rather a tool in the toolbox to shape crucial conversations around problematic actions.

## **Applicability:**

- NASA Astrophysics personnel at NASA Headquarters (HQ) as well as NASA Astrophysics' Program Offices (POs) and associated support personnel, regardless of employer.
- Those who participate in meetings sponsored by NASA Astrophysics, such as conferences, workshops, panels, and Program Analysis Group (PAG) meetings.

All activities organized or sponsored by NASA Astrophysics, such as meetings and panels, should adopt a code of conduct.

In addition, there are best practices that are described in the following 5 areas:

- 1) Professional Conduct
- 2) Communication
- 3) Training
- 4) Maintaining a Safe Space
- 5) Reporting

<https://science.nasa.gov/astrophysics/documents>



# ExoPAG Code of Conduct

<https://exoplanets.nasa.gov/exep/events/461/exopag-28/#conduct>

Attendees of ExoPAG 28 are expected to abide by the following Code of Conduct.

The organizers are committed to making this meeting productive and enjoyable for everyone, regardless of gender, sexual orientation, disability, physical appearance, body size, race, nationality or religion. We will not tolerate harassment or bullying of participants in any form. Please follow these guidelines:

- Behave professionally. Harassment, bullying, and sexist, racist, or exclusionary comments or jokes are not appropriate. Harassment includes sustained disruption of talks or other events, inappropriate physical contact, sexual attention or innuendo, deliberate intimidation, stalking, and photography or recording of an individual without consent. It also includes offensive comments related to gender, sexual orientation, disability, physical appearance, body size, race or religion.
- All communication should be appropriate for a professional audience including people of many different backgrounds. Sexual language and imagery is not appropriate.
- Be kind to others. Do not insult or put down other attendees. Critique ideas, not people.
- If participants wish to share photos or contents of talks/slides of any attendee or speaker on social media, we ask that they first get permission.

Participants asked to stop any inappropriate behavior are expected to comply immediately. Attendees violating these rules will be asked to leave the event at the sole discretion of the organizers.

Any participant who wishes to report a violation of this policy is asked to speak, in confidence, to Hannah Jang-Condell ([hannah.jang-condell@nasa.gov](mailto:hannah.jang-condell@nasa.gov)) or Ilaria Pascucci ([pascucci@arizona.edu](mailto:pascucci@arizona.edu))

This code of conduct is based on the "London Code of Conduct", as originally designed for the conference "Accurate Astrophysics. Correct Cosmology", held in London in July 2015. The London Code of Conduct was adapted with permission by Andrew Pontzen and Hiranya Peiris from a document by Software Carpentry, which itself derives from original Creative Commons documents by PyCon and Geek Feminism. It is released under a CC-Zero licence for reuse. To help track people's improvements and best practice, please retain this acknowledgement, and log your re-use or modification of this policy.



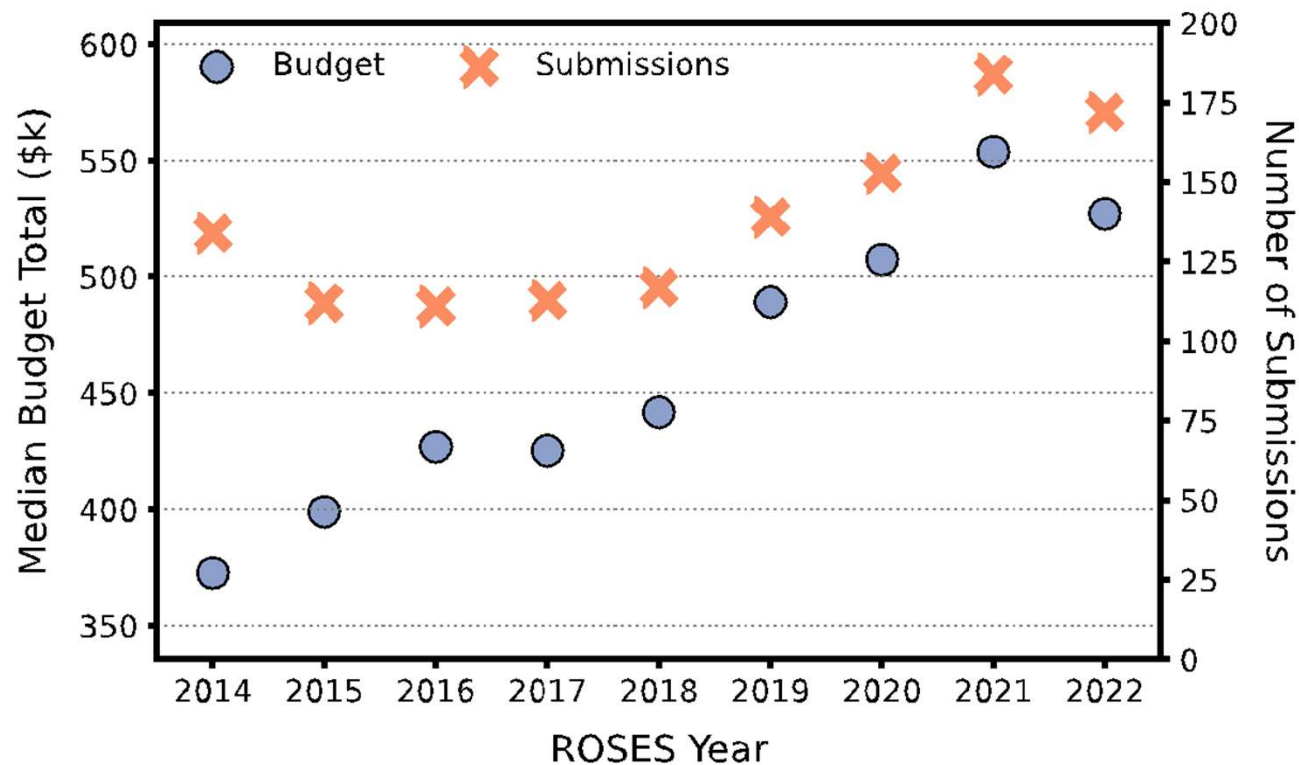
# Research Program Update



# Exoplanets Research Program Budgets

Budgets of XRP proposals have growing faster than total XRP funding

## XRP Budgets Over Time





## New ROSES-22 Opportunities

### **D.14 Roman Mission Research and Support Participation Opportunities**

- NOIs requested by January 20, 2023
- Proposal due date March 21, 2023

### **D.16 Astrophysics Decadal Survey Precursor Science**

- Mandatory NOIs due January 20, 2023
- Proposals due March 24, 2023

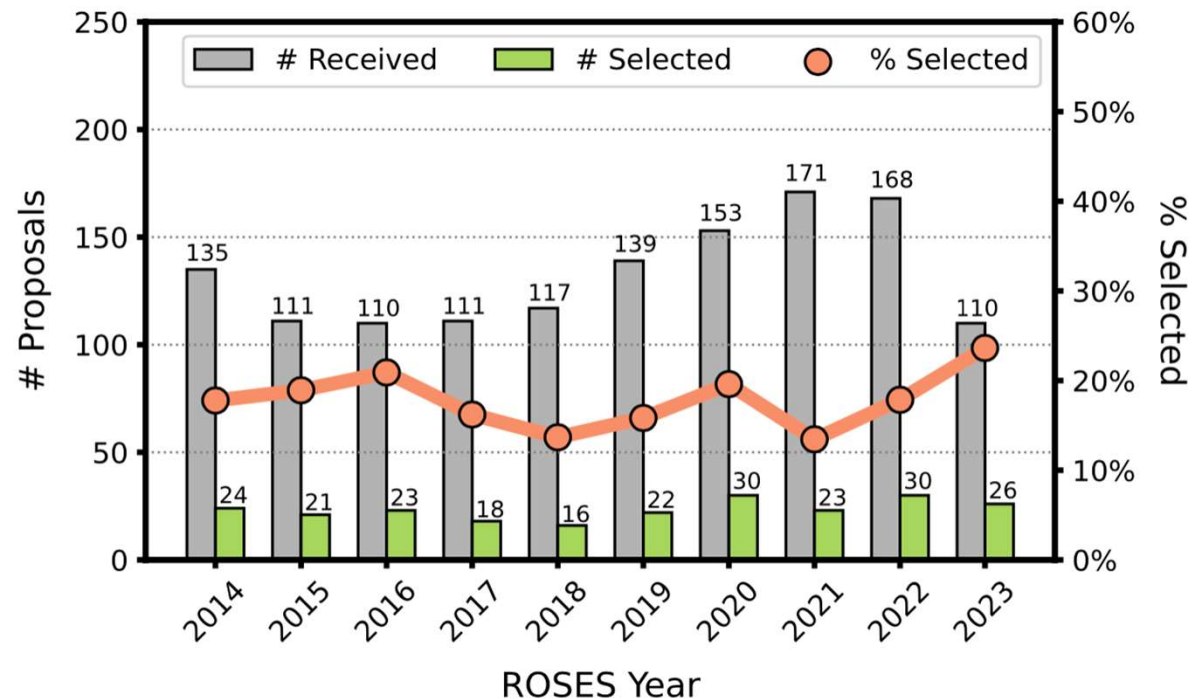
### **D.18 Extreme Precision Radial Velocity Foundation Science**

- Step-1 proposals due February 16, 2023
- Step-2 proposals due April 26, 2023



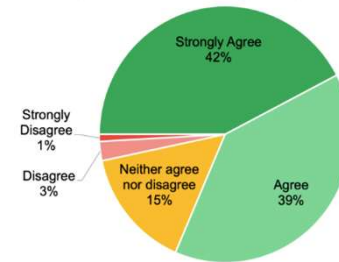
# Exoplanets Research Program (XRP) Updates

- Since ROSES-20, exoplanet research has been **consolidated into XRP**. Exoplanet technology development remains in APRA.
- XRP **submission rates** in ROSES-23 down significantly from previous years (R&A programs across SMD have seen decreases since ROSES-22).
- XRP **selection rates** have continued to improve since ROSES-21.

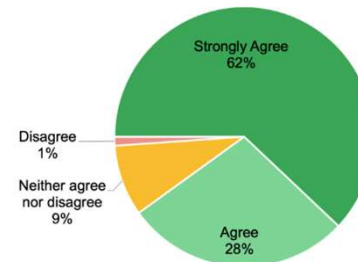


# XRP & Dual Anonymous Peer Review (DAPR)

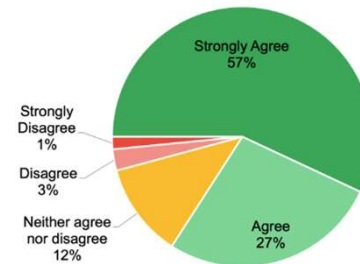
- XRP-23 was the program's **3<sup>rd</sup> year** under the Dual-Anonymous Peer Review (DAPR) process.
- Proposals with **egregious DAPR violations** (e.g., team member info in anonymized PDF, usage of author-date citations) will be returned without review.
- Most **common violations** are gender pronouns in anonymized PDF (esp. Budget Narrative, Work Effort, OSDMP) and improperly/incompletely redacted budgets (e.g., blacked-out but not redacted).
- Reach out to XRP Program Officers well ahead of proposal deadline with DAPR questions! General DAPR questions may be directed to **DAPR Director Douglas Hudgins** [douglas.m.hudgins@nasa.gov](mailto:douglas.m.hudgins@nasa.gov)



*DAPR improved overall quality of peer review: 81% (strongly) agree*



*DAPR led to panel discussions focusing on science rather than on team members: 90% (strongly) agree*



*DAPR should be implemented in the future for the given program: 84% (strongly) agree*



## Open Science & Data Management Plans (OSDMP)

- In ROSES-23+, Data Management Plans (DMPs) have been **expanded** to Open Science & Data Management Plans (OSDMPs) under SPD-41A:  
<https://science.nasa.gov/researchers/science-data/science-information-policy>
- OSDMPs now must cover plans for the open sharing of **publications, data, and software** produced by ROSES awards.
- SMD provides guidelines on OSDMP requirements & compliance here: <https://github.com/nasa/smd-open-science-guidelines>
- Reach out to XRP Program Officers well ahead of proposal deadline with OSDMP questions! General OSDMP questions may be directed to [HQ-SMD-SPD41@mail.nasa.gov](mailto:HQ-SMD-SPD41@mail.nasa.gov)

# Open Source Science ROSES Solicitations

	Title	Description	Examples
<b>F.7</b>	Support for Open-Source Tools, Frameworks, and Libraries	Support for the <b>improvement &amp; sustainment of existing</b> high-value, open-source tools, frameworks, and libraries that have made significant impacts to the SMD science community.	Adding extensions, documentation, and maintenance of software to support user community.
<b>F.8</b>	Supplements for Open-Source Science	Supplemental awards to <b>add an open science component to an existing award</b> that increases the accessibility, inclusivity, and/or reproducibility of the parent award.	Writing tutorials for software or data usage produced by the parent award.
<b>F.14</b>	Transform to Open Science Training	Support for <b>trainings and workshops</b> aimed at advancing open science literacy and targeting audiences from undergraduate students to established scientists	Development of open science curriculum, implementation of summer schools and virtual cohorts.
<b>F.15</b>	High Priority Open-Source Science	Support for <b>innovate open-source projects</b> that advance the goals of open science and will have a significant impact on the SMD science community.	Advancing access and discoverability of research data (e.g., via metadata, persistent identifiers, data formats) and software.
<b>F.16</b>	Supplements for Scientific Software Platforms	Supplemental support to <b>existing awards for usage of scientific platforms</b> (i.e., interactive environments accessible through web browser that provide access to data & computing resources to support scientific analysis & processing)	Providing computing resources and tools co-located with scientific data to allow for processing, visualization, etc. not be typically available via desktop computing.

Now open with rolling submission

[Link to list of NASA Open-Source Science funding opportunities](#)



# NASA's Transform to Open Science (TOPS)

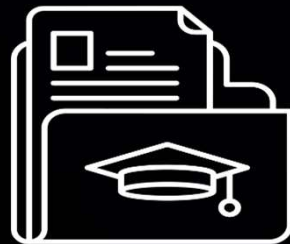
a 5-year mission to accelerate adoption of open science

## Goals:

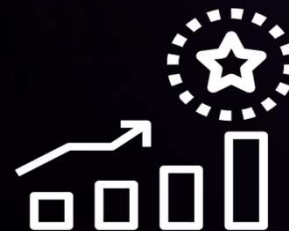
- Increase understanding and adoption of open science principles and techniques
- Broaden participation by historically excluded communities
- Accelerate major scientific discoveries



Engagement



Capacity Sharing



Incentives



Coordination



<https://nasa.github.io/Transform-to-Open-Science/>



# Planetary Science & Exoplanet Science

## ❖ Exoplanet-related Planetary Community Groups & Meetings:

- VEXAG & OPAG → Venus + Outer Planet “Analysis Groups” (AGs)
- Exoplanets in our Backyard (EioB) → exoplanet + planetary synergies

## ❖ Planetary Data Ecosystem (PDE):

- Planetary Data Website: <https://science.nasa.gov/solar-system/planetary>
- 2021 PDE IRB Report (updated recommendation responses ongoing)

## ❖ Contacts:

- VEXAG NASA HQ Liaison: Nick Lang ([nicholas.p.lang@nasa.gov](mailto:nicholas.p.lang@nasa.gov))
  - VEXAG meeting October 30 and 31, 2023
- OPAG NASA HQ Liaison: Henry Throop ([henry.throop@nasa.gov](mailto:henry.throop@nasa.gov))
  - OPAG meeting November 28–29, 2023
- Planetary Data Officer: Robin Fergason ([robin.l.fergason@nasa.gov](mailto:robin.l.fergason@nasa.gov))
- PSD XRP Lead: Megan Ansdell ([megan.c.ansdell@nasa.gov](mailto:megan.c.ansdell@nasa.gov))



# Exoplanet Missions

- <sup>1</sup> NASA/ESA Partnership
- <sup>2</sup> NASA/ESA/CSA Partnership
- <sup>3</sup> CNES/ESA
- <sup>4</sup> ESA/Swiss Space Office
- <sup>5</sup> NSF Partnership (NN-EXPLORE)







Get involved







# Keep Connected with NASA

NSPIRES mailing list – information about NASA solicitations

<https://nspires.nasaprs.com/>

Cosmic Origins mailing list, Exoplanet Exploration mailing list, Physics of the Cosmos mailing list – information about NASA missions and science

<https://cor.gsfc.nasa.gov/cor-news-mailing-list.php>

<https://exoplanets.nasa.gov/exep/exopag/announcementList/>

<https://pcos.gsfc.nasa.gov/pcosnews-mailing-list.php>

NASA Astrophysics Federal Advisory Committees

Astrophysics Advisory Committee (APAC)

<https://science.nasa.gov/researchers/nac/science-advisory-committees/apac>

NASEM Committee on Astronomy and Astrophysics (CAA)

[http://sites.nationalacademies.org/bpa/bpa\\_048755](http://sites.nationalacademies.org/bpa/bpa_048755)

Astronomy and Astrophysics Advisory Committee (AAAC)

<https://www.nsf.gov/mps/ast/aaac.jsp>

Sign up to be a panel reviewer:

<https://science.nasa.gov/researchers/volunteer-review-panels>



# Why Volunteer to Serve on a NASA Peer Review Panel?

## Personal professional development:

- See how the whole review process works
- Learn what constitutes excellent proposals
- Network with your professional colleagues and NASA scientific staff

## Institutional achievement:

- Improve at competing for NASA money
- Increase knowledge of NASA's research and technology programs

## Investment in the future:

- Help select the most transformative science
- Ensure that all proposals receive a fair and competent review

All reviewers receive an honorarium from NASA

## Sign up to be a panel reviewer:

<https://science.nasa.gov/researchers/volunteer-review-panels>

or contact a NASA program officer (for contact info, see

<https://science.nasa.gov/researchers/sara/program-officers-list>)



Questions?

