

Exoplanet Program Analysis Group (ExoPAG)

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

- The ExoPAG is led by a Chairperson 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.
- All members of the community are encouraged to consider nominating themselves of a colleague to serve on the ExoPAG EC. Service on the EC provides an excellent opportunity to:
 - o Initiate a Science Analysis/Interest Group.
 - o Review and contribute to the ExEP Science and Technology Development Gap Lists.
 - o 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 (EC)

Name	Home Institution
Michael Meyer (Chair)	Univ. of Michigan
Tom Barclay*	NASA GSFC
Natasha Batalha	NASAARC
Jacob Bean	Univ. of Chicago
Jessie Christiansen*	Caltech
John Debes	STScl
Rebecca Jensen-Clem*	Univ. of California, Santa Cruz
Tiffany Kataria	JPL
Josh Pepper	Lehigh Univ.
Dmitry Savransky	Cornell Univ.
Laura Schaefer	Stanford Univ.
Vikki Meadows (past chair, ex officio)	Univ. of Washington

Programmatic Support:

- Douglas Hudgins, NASA HQ Executive Secretary, NASA POC
- Doris Daou, 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

We anticipate appointing new members to the ExoPAG EC during Spring 2021 to replace those current members of the EC who are reaching the end of their terms. The call for nominations is available online at:

https://exoplanets.nasa.gov/system/internal_resources/details/original/1811_2021-ExoPAG-EC-call.pdf

The deadline for submitting nominations is 22 January 2021. Self nominations are welcome.

^{* -} Member whose term ends in Spring 2021.





Paul Hertz Astrophysics Division Director



Jeff Volosin Astrophysics Division **Deputy Director**



Executives Program



E. Lucien Cox SOFIA, GUSTO, XRISM, ExEP Program



Ed Griego Astrophysics



Shahid Habib COR, PCOS, ARIEL, Operating Missions Athena, Euclid, LISA, UltraSat



Future Janet Letchworth Roman



Mark Sistilli **Explorers Program** IXPE. SPHEREX Balloons

Cutting Cross

Scientists

Program



Eric Smith Chief Scientist Webb



Jeanne Davis Assoc. Dir for Flight **ASM Program Manager**



Mario Perez Chief Technologist SAT, RTF

Not Pictured

Lisa Wainio Information Manager, Public Affairs Liaison



Kelly Johnson Administrative Assistant



Maria Washington Jackie Mackall Administrative Assistant **Program Support**

Not

Pictured



Ingrid Farrell Program Support Specialist

Dominic Benford APRA Lead Roman



Valerie Connaughton APRA (High Energy) XRISM, UltraSat



Dan Evans PCOS Program NICER Dual Anon.PR



Michael Garcia APRA (UV/Optical), SmallSats/Pioneers Hubble, Athena



Thomas Hams APRA (CR, Fund. Phys.) Rockets/Balloons GUSTO, LISA



Administrative

Hashima Hasan Douglas Hudgins Education/Comms, Astrophys. Archives, NuSTAR, Keck



ExEP Program ADAP Lead

TESS, ARIEL



Stefan Immler Astrophys. Research Program Mgr, Chandra, XMM



Not Pictured

Specialist

Hannah Jang-Condell FINESST. ExEP Program, TESS



Astrophysics Explorers Program, SOFIA, Hubble Fellows



William Latter APRA (Lab Astro) Spitzer, SPHEREx, Fermi



Pamela Marcum Exoplanet Research Program (XRP)



Roopesh Ojha Data Management. FINESST, XMM



Aki Roberge ASMP, Roman



Scannapieco ATP / TCAN Lead. Swift



Kartik Sheth COR Program



Linda Sparke On detail to the Office of the Administrator



Eric Tollestrup APRA (IR/Submm) Euclid, IXPE



Heather Watson Dep. Chief Technologist. Explorers, SmallSats/Pioneers



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Program xecutive



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Ed Griego Astrophysics Operating Missions



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Janet Letchworth Roman

Not Pictured



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Lucien Cox has joined the ExEP team at NASA HQ as the Program Executive, taking over from Shahid Habib.

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Kelly Johnson Administrative Assistant



Maria Washington Jackie Mackall Administrative Assistant **Program Support** Specialist

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Stefan Immler Astrophys. Research Program Mgr, Chandra, XMM



Hannah Jang-Condell FINESST. EXEP Program, TESS



Patricia Knezek Astrophysics Explorers Program, SOFIA, **Hubble Fellows**



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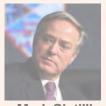
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Eric Smith Chief Scientist Webb



Jeanne Davis Assoc Dir for Flight ASM Program Manager



Mario Perez Chief Technologist SAT. RTF

Hannah Jang-Condell has joined the Astrophysics Division as an IPA and will serving as the ExEP **Deputy Program Scientist and other** exoplanet-related activities.



Not

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Program Support Specialist

Dominic Benford APRA Lead

Roman



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Dan Evans PCOS Program NICER Dual Anon.PR



Michael Garzia APRA (UV/Op SmallSats/ Hubble, Athena



The Astrophysics Division is pleased to announce the

hiring of three new civil servant Program Scientists:

Thomas Hams APRA (CR, Fund. Phys.) Rockets/Balloons GUSTO, LISA



Hashima Hasan Douglas Hudgins Education/Comms Astrophys. Archives, NuSTAR, Keck



ExEP Progra ADAP Lead TESS, ARIEL



Hannah Jang-Condell FINESST. EXEP Program, TESS



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Astrophys. Research

Program Mgr,

Eric Tollestrup APRA (IR/Submm) Euclid, IXPE



Heather Watson Dep. Chief Technologist Explorers, SmallSats/Pioneers

Not

Future

Research Program Update

2021 Astrophysics Research Program Elements

Red – programs using dual-anonymous peer review

ROSES 2021:

Supporting Research and Technology

- Astrophysics Theory Program (ATP), every other year
- Astrophysics Research & Analysis (APRA)
- Strategic Astrophysics Technology (SAT)
- Roman Technology Fellowships (RTF)

Data Analysis

- Astrophysics Data Analysis (ADAP)
- GO/GI programs for Fermi, Swift, NuSTAR, TESS, NICER

Mission Science and Instrumentation

- Astrophysics Pioneers (suborbital science investigations)
- Suborbital payloads solicited through APRA
- XRISM Guest Scientist New
- Roman Research and Support Opportunities New

Cross Divisional

- Exoplanets Research Program (XRP)
- Topical Workshops, Symposia and Conferences (TWSC)
- Citizen Science Seed Funding Program New
- Graduate Student Research Awards (FINESST)

Not in ROSES 2021:

Separately Solicited

- GO/GI/Archive/Theory programs for Hubble, Chandra, SOFIA, Webb
- NASA Hubble Fellowship Program (NHFP)
- NASA Postdoctoral Program (NPP)
- Support for XMM-Newton U.S. Pls selected by ESA

Not Solicited this Year

- Theoretical and Computational Astrophysics Networks (TCAN), every three years
- Astrophysics Explorers U.S. Pls (APEX USPI), every two to three years

NASA Research Program Town Hall Splinter Session Wednesday 13 Jan @ 12:00 pm ET

NASA R&A Zoom Chat at NASA Virtual Booth Friday 15 Jan @ 2:40 pm ET

Dual Anonymous Peer Review at NASA Webinar Daniel Evans, Tuesday 12 Jan @ 4:00 pm ET

Exoplanet Research Program (XRP) Update

In recent years, there has been concern in the community over falling proposal selection rates in the Exoplanet Research Program (XRP).

• Primarily the result of rising proposal pressure in the face of a level budget.

Concern was compounded under ROSES 2020 when the Astrophysics Division announced plans to consolidate its support for exoplanet science research under the XRP.

- Exoplanet-focused mission data analysis research moved from the Astrophysics Data Analysis Program.
- Exoplanet-focused theory and modeling moved from the Astrophysics Theory Program.

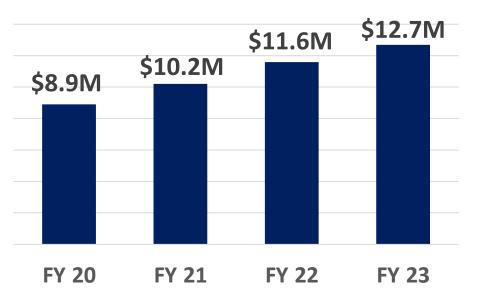


Exoplanet Research Program (XRP) Update

Program Status:

- Budget climbing significantly over the period FY20 thru FY23.
 - Increase reflects reallocation funds within the Astrophysics research portfolio to offset the change in scope of the program, but also real growth in the program budget.

XRP Budget
Reflects both Astrophysics and Planetary Science Division Contributions



Exoplanet Research Program (XRP) Update

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XRP 2020 Results

- 156 Step-2 (full) proposals submitted (12.2% increase over previous year.
- 26 proposals were selected outright 16.7% selection rate.
- Selection decisions have been deferred for an additional 16 highly-rated proposals.
- Potential for higher selection rate if suitable funding is available.



Extreme Precision Radial Velocity Foundation Science

The Extreme Precision Radial Velocity (EPRV) Foundation Science program is a new solicitation released as Appendix 17 to ROSES 2020 on October 9.

- First announced at ExoPAG 22 in June 2020
- Represents an initial response to the recommendations of the NASEM's 2018 Exoplanet Science Strategy and the implementation framework developed subsequently by the joint NASA-NSF EPRV Working Group.
- There are currently no plan for additional proposal calls under this program element, but that possibility will be considered in the formulation of NASA's response to the 2020 Astrophysics Decadal Survey.

Summary of Solicitation

- Central question: "Can stellar variability be understood well enough to mitigate its limitation on radial velocity measurement precision?"
- 2-year investigations may involve observations, theory/modeling, and/or data analysis, as well as the development of advanced statistical methodologies for analyzing complex RV datasets.
- Funds available for award: \$1.75M
- 30 Step-1 proposals received by December 17, 2020 deadline
- Step-2 proposal deadline is January 28, 2021
- Selections announced in April 2021.

Reviewers needed! If you are not participating in a proposal to this program element and are interested in serving as a reviewer, please contact either Doug Hudgins (Douglas.M.Hudgins@nasa.gov) or Hannah Jang-Condell (Hannah.Jang-Condell@nasa.gov)

New in 2020: Astrophysics Pioneers

Pioneers: A new class of small missions offered for first time in ROSES-2020, \$20M maximum PI cost cap

- Include SmallSats, CubeSats >6U, major balloon payloads, and modest ISS attached payloads with a \$20M cost cap, not including launch
- Fill in the gap between existing ROSES investigations (<\$10M for APRA) and existing Explorers MO investigations (~\$35M for SmallSats)
- Solicit through ROSES; relieves burden of writing full Explorers MO proposal
- Manage as Research and Analysis projects with enhanced research project processes with defined gates and light touch management from WFF and HQ, rather than flight project processes appropriate for a Small Explorer (SMEX) mission

Received 24 proposals on October 8, 2020 (17 SmallSats, 7 Balloons); most were selectable

Selection of 4 proposals to be announced January 2021 Next round of Pioneers proposals due in Fall 2021

Astrophysics Mission Classes

Mission Class	How initiated	Total Cost (PI cost cap when different)
Large: Great Observatory or Flagship	Decadal Survey	> \$1B
Medium: Probe	Decadal Survey	~\$1B
Small: Medium Explorer (MIDEX)	Explorer AO	~\$450M (\$290M)
Small Explorer (SMEX)	Explorer AO	~\$225M (\$145M)
Standard Mission of Opportunity *	SALMON AO	\$80M
SmallSat Mission of Opportunity *	SALMON AO	\$40M
Pioneers SmallSat *	ROSES	\$20M
APRA CubeSat	ROSES	<\$10M **
Suborbital: Pioneers Balloon	ROSES	\$20M
APRA Balloon	ROSES	<\$10M **
APRA Sounding Rocket	ROSES	~\$5M **

^{*} includes ISS-attached experiments

^{**} not explicitly cost capped; value is historical upper bound for support within APRA

Diversity, Equity, and Inclusion at NASA

Diversity and Inclusion at NASA

In July 2020, NASA Administrator James Bridenstine announced the explicit addition of "Inclusion" to the Agency's Core Values.

The elevation of the organizational priority of Inclusion is supported by Strategy 4.1 of the 2020 NASA Science Plan to "Increase the diversity of thought and backgrounds represented across the entire SMD portfolio through a more inclusive and accessible environment."

Accordingly, in SMD we are committed to fostering a community where everyone feels welcome, included and valued. Our goals are to develop a workforce and scientific community that reflects the diversity of the country and to instill a culture of inclusion across the entire SMD portfolio.



Diversity and Inclusion at NASA

Ongoing activities to advance the goal of advancing Diversity and Inclusion within NASA and the scientific community:

• SMD level: Hosting <u>incubator workshops</u> and implementing actions from those workshops focused on short-term changes to how we are operating and how we grow our leaders. <u>Studying barriers to inclusion in mission</u> <u>leadership</u>. Standing up a long-term activity focused on sustained engagement, systemic, and lasting changes.



- Division level: Division task forces working to align division-level practices with the NASA core value and SMD science strategy.
- Proposal Processes: Recognizing we have influence through our calls for proposals and our processes for evaluating proposals. Piloting dual-anonymous peer review and seeking to expand that. Actively looking into how we can be a model for inclusivity.

Enhancing Participation of Minority Serving Institutions in NASA Space Science Monday 11 Jan @ 6:50 pm ET

SMD Anti-Racism Action Group (ARAG)

It is the purpose of the ARAG to propose and implement near-term tactical actions to address the lack of equity and inclusion of the Black, Indigenous, and People of Color (BIPOC) community in SMD and its stakeholder communities through anti-racist actions.

Collect and prioritize anti-racist actions based on their likelihood to be impactful and group's ability to implement in ~1-3 months:

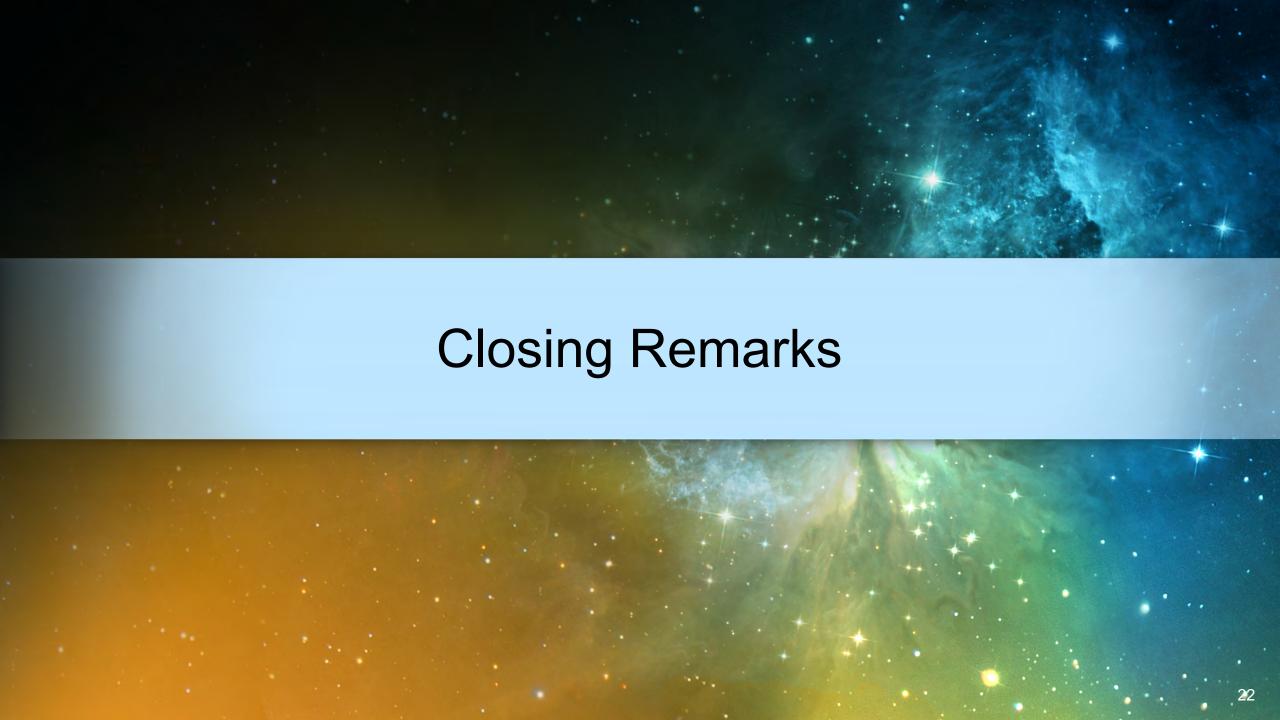
- Within SMD's HQ workforce.
- Within the SMD partner and stakeholder community.
- Within the general public.

All initiatives and actions pursued will have well-defined outcomes and will be allowed to evolve as new information is learned during the implementation period.

For additional information, attend the NASA Research Program Town Hall Splinter Session at AAS 237 Wednesday 13 Jan @ 12:00 pm ET

Thomas Zurbuchen (Co-Chair, SMD AA)
Kartik Sheth (Co-Chair, Astrophysics)
Laura Delgado Lopez (Exec Secy, Policy)
Gregory L. Robinson (Webb)
Peg Luce (Heliophysics)
Meagan Thompson (Planetary Science)
Benjamin Phillips (Earth Science)
Paula Evans (LMI)





Why aren't you talking about...

The FY21 NASA Budget

- See NASA Town Hall presentation by Paul Hertz, Tue 12 Jan @ 1:40 pm ET
 The ExEP Science Gap List?
- See presentation by Karl Stapelfeldt @ 12:45 PM EST

NN-EXPLORE/NEID Instrument Status?

See presentation by John Callas @ 1:00 PM EST

Technology Development and the ExEP Technology Gap List?

- See presentation by Brendan Crill @ 1:45 PM EST
- See also presentation by Nick Siegler and Thai Pham @ joint PAG session,
 Friday Jan 8 2:30 PM EST

The TESS mission?

See presentations by George Ricker and Padi Boyd @ 4:00 and 4:30 PM EST

NASA-Related Town Halls at

A A S 237 DED D

237TH MEETING OF THE AMERICAN ASTRONOMICAL SOCIETY
VIRTUALLY ANYWHERE 10 – 15 JANUARY 2021

Fri 15 Jan @ 1:40 pm ET

	Session	
NASA Town Hall	220	Tue 12 Jan @ 1:40 pm ET
R&A Program Town Hall	Splinter	Wed 13 Jan @ 12:00 pm ET
STScI Town Hall	319	Wed 13 Jan @ 1:40 pm ET
Webb Space Telescope Town Hall	419	Thu 14 Jan @ 1:40 pm ET
Science Activation Next Phase	Splinter	Thu 14 Jan @ 4:10 pm ET
SOFIA Town Hall	519	Fri 15 Jan @ 1:40 pm ET

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Program Analysis Groups (PAGs)

Roman Space Telescope Town Hall

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COPAG	Mon @ 12:00 pm	PhysPAG	Mon @ 12:00 pm
SIGs	Far-IR/Origins (Tue @ 12:00 pm)	SIGs	Multi-Messenger (Tue @ 12:00 pm)
	Low Freq Radio (Wed @ 12:00 pm)		Inflation Probe (Wed @ 12:00 pm)
	UV/Vis/Tech (Thu @ 12:00 pm)		X-ray (Wed @ 6:50 pm)
	Cosmic Origins (Fri @ 12:00 pm)		Gravitational Wave (Thu @ 12:00 pm)
			Cosmic Structure (Thu @ 4:10 pm) 24

Keep Informed about 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/cornews-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

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

