**Headquarters** Washington, DC 20546-0001



September 27, 2025

Reply to Attn of: SMD/ Astrophysics Division

SUBJECT: CALL FOR NOMINATIONS TO THE EXECUTIVE COMMITTEE OF THE PHYSICS OF THE COSMOS PROGRAM ANALYSIS GROUP (PHYSPAG)

## Dear Colleagues:

The Astrophysics Division of NASA's Science Mission Directorate is pleased to issue this open call for nominations, including self-nominations, to serve on the Executive Committee of NASA's Physics of the Cosmos Program Analysis Group, or PhysPAG (<a href="http://pcos.gsfc.nasa.gov/physpag/">http://pcos.gsfc.nasa.gov/physpag/</a>). In the coming months, NASA anticipates making multiple new appointments to the PhysPAG Executive Committee (EC) in order to replace several current members who will be rotating off the committee. Appointments will be for a nominal period of three calendar years for each selected candidate.

The Physics of the Cosmos (PhysCOS) Program is one of the three thematic programs that encompass NASA Astrophysics. PhysCOS seeks to answer the enduring question "How does our Universe work?". The other two thematic programs, Exoplanet Exploration (ExEP) and Cosmic Origins (COR) seek to answer the questions "Are we alone?" and "How did we get here?", respectively.

The PhysPAG is an open, interdisciplinary forum that provides a conduit for community input into NASA's PhysCOS Program. The PhysPAG conducts analyses in support of science objectives and their implications for planning and prioritization of Program activities. The PhysPAG is led by an Executive Committee whose membership is chosen to reflect the broad range of scientific disciplines and interests represented in PhysCOS. As a member of the PhysPAG EC, you will provide NASA with expert analysis of the science and/or technology gaps and offer analysis of solutions on how these gaps may be closed to realize the vision for our desired understanding of the cosmos. Members of the PhysPAG EC are expected to be active participants at regular meetings. EC members may be asked to report on various community activities or interactions and are expected to communicate relevant PhysPAG information with their home institutions and colleagues in the field on a regular basis. Serving on the PhysPAG EC requires a time commitment of order 10 hours per month.

With the implementations by NASA of the strong recommendations of the Astro2020 Decadal Survey in the area of PhysCOS science well underway, it is more important than ever to maintain

a strong connection between NASA and the astrophysics community to ensure ongoing meaningful community input. Since the release of Astro2020, two new Science Interest Groups (SIGs) have been formed to address PhysCOS science relevant to the top priorities of Astro2020: the Habitable Worlds Observatory and Time-Domain and Multi-Messenger Astrophysics SIGs (both in collaboration with the other PAGs). The PhysPAG EC oversaw a Science Analysis Group (SAG) study on future Space Communications as the Tracking and Data Relay Satellite System (TDRSS) constellation ages, resulting in a Summer '24 report to NASA Headquarters. NASA is responding to advisory committee recommendations from this report. Looking forward to Astro2030, the Future Innovations in Gamma Rays (FIG) Science Analysis Group (SAG), initiated within the Gamma-Ray SIG, began developing a roadmap for their community in Fall '23 and anticipates delivering their report in early 2026. The X-ray and Inflation Probe SIGs have recently stood up 4 SAGs examining the science cases for potential future missions. The Gravitational Wave, Cosmic Structure, and Cosmic Ray & Neutrino SIGs have also been active in helping NASA respond to Astro2020 and begin to prepare for Astro2030 by engaging their communities in special sessions at national conferences and dedicated virtual meetings.

Over the last year, the PhysPAG EC and SIG leadership structure has been adjusted to better support an increased level of community activities. The majority of EC members will also serve as SIG chairs, with each SIG represented in the EC. However, each SIG's leadership is now also supplemented by one or more additional co-chairs, selected by the EC members, tasked to support and organize SIG activities. NASA is also interested in adding expertise to the EC in areas that may not naturally align with the existing SIGs but cut across different fields in physics and astrophysics, including theoretical and computational physics/astrophysics, artificial intelligence, and astrophysics from the Moon.

Serving on the PhysPAG EC offers excellent career growth for all members of the PhysCOS community, regardless of career stage. EC members gain tremendous insight into the workings of NASA, as well as the opportunity to expand their professional networks as recognized leaders of the PhysCOS community.

Nominations, including self-nominations, for the PhysPAG EC should be submitted via email to <a href="PhysPAG-ECNominations@bigbang.gsfc.nasa.gov">PhysPAG-ECNominations@bigbang.gsfc.nasa.gov</a>. Nominations must include both a cover letter and a one-page curriculum vitae summarizing the nominee's relevant background, all bound in a single PDF file with a file size no greater than 1 Mb. The cover letter should provide a description of the nominee's area(s) of expertise and qualifications for serving on the PhysPAG EC. The cover letter should also affirm that the nominee has the time available to be an active member of the EC at the necessary engagement level. The deadline for receipt of nominations is November 14, 2025, with announcement of selections anticipated in December 2025.

EC members will be selected according to the following criteria:

- a) Personal and professional backgrounds, geography, institution size, institution type, career stage, breadth of science and technology expertise.
- b) As noted above, we seek EC members who can provide NASA with expert analysis of the science and/or technology gaps and offer analysis of solutions on how these gaps may be closed to realize the vision for our desired understanding of the Physics of the Cosmos.
- c) Relevant expertise to lead the current or planned SIGs (a list of current SIGs appears at <a href="https://pcos.gsfc.nasa.gov/physpag/sigs-sags.php">https://pcos.gsfc.nasa.gov/physpag/sigs-sags.php</a>), and/or to spearhead analysis efforts that

- aid NASA's implementation of the recommendations of Astro2020 and preparations for Astro2030.
- d) EC members should also be "connectors" and "communicators", i.e., be active and engaged in the astrophysics community so that they can help facilitate a vibrant exchange of ideas, information, and knowledge between NASA and the broader community.

Nominations will only be accepted for scientists who reside at a U.S. Institution for the period of the service. There is no limitation on citizenship.

We look forward to working with all of our stakeholders to continue a robust and compelling Physics of the Cosmos Program.

## Sincerely,

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