

EXOPLANET EXPLORATION  
PROGRAM ANALYSIS GROUP (ExoPAG)

TERMS OF REFERENCE

The ExoPAG serves as a community-based, interdisciplinary forum for soliciting and coordinating community analysis and input in support of Exoplanet Exploration objectives and of their implications for architecture planning and activity prioritization and for future exploration. It provides findings of analyses to the NASA Astrophysics Division Director.

The strategic goal of NASA's Exoplanet Exploration Program (ExEP) is to discover and study planets around other stars, and explore whether they could harbor life. The objective of the Program is to explore and characterize new worlds, enable advanced telescope searches for Earth-like planets, and discover habitable environments around neighboring stars.

The ExoPAG enables direct regular communication between NASA and the community, and within the community, through public meetings that give the community opportunities to provide its scientific and programmatic input. Structurally, the ExoPAG Chair and the ExoPAG Executive Committee (EC) are appointed members whose responsibilities include organizing meetings and collecting and summarizing community input with subsequent reporting to the Astrophysics Division Director. The full ExoPAG consists of all members of the community who participate in these open meetings.

The ExoPAG may be tasked, as described below, to carry out the following:

- Articulate and prioritize the key scientific drivers for Exoplanet Exploration research ;
- Evaluate the expected capabilities of potential ExEP missions for achieving the science goals of the Program ;
- Evaluate ExEP goals, objectives , investigations and required measurements on the basis of the widest possible community outreach;
- Articulate and prioritize focus areas for needed mission technologies ; and
- Provide findings on related activities such as ground-based observing, theory and modeling programs, laboratory astrophysics, suborbital investigations, data archiving and community engagement.

MEMBERSHIP

The Chair of the ExoPAG is drawn from the U.S. astrophysics community and is appointed by the Astrophysics Division Director following consultation with the Associate Administrator (AA) for the Science Mission Directorate (SMD). The Chair is assisted by an Astrophysics Division staff member who serves as Executive Secretary and is a single point of contact within NASA, and the Executive Committee, which supports planning and conducting activities of the ExoPAG. The ExoPAG Executive Secretary is appointed by the Astrophysics Division Director. Nominations for the ExoPAG executive committee are solicited through an open "Dear Colleague" letter to the community, and appointments are made by the Astrophysics Division Director following consultation with the ExoPAG Chair, the ExEP Program Scientist, and the ExEP Chief Scientist. The ExoPAG executive committee is constituted to achieve a functional

balance and diversity among members of the Exoplanet Exploration Program community. The nominal term for executive committee members is three years.

## MEETINGS

The ExoPAG will typically meet biannually or as otherwise needed as their tasks dictate. Tasking for ExoPAG activities will be initiated from the Astrophysics Division, in consultation with the ExoPAG Chair. The ExoPAG Chair will set the regular annual meeting schedule in consultation with the executive committee.

The ExoPAG may choose to organize sub-groups (e.g., Science Analysis Groups – SAGs, Science Interest Groups - SIGs) to deal with specific issues and report their findings to the full group. A SAG is typically tasked with reporting on a specific issue, and when the analysis of that issue is complete the SAG is disbanded. A SIG is typically tasked with collecting community input from a specific community on a longer-term basis. Establishment of such subgroups should address a clearly-defined NASA programmatic need or represent an acknowledged component of NASA's ExEP portfolio (in the case of SIGs), and must be approved by the Astrophysics Division Director.

## REPORTING

The findings and analysis activity of each meeting of the ExoPAG will be reported through written reports to NASA as well as presentations at public forums including, when requested by the Astrophysics Division Director, meetings of the NASA Astrophysics Advisory Committee (APAC). All findings and analyses submitted to NASA by the ExoPAG will be made publicly available through the ExEP web site.

## ADMINISTRATIVE PROVISIONS

Logistical and organizational support to the ExoPAG Chair and Executive Committee members will be provided through the ExEP Program Office at the Jet Propulsion Laboratory on behalf of the SMD Astrophysics Division. This support includes such functions as maintaining the ExoPAG web site and email notification list, arranging logistics for ExoPAG meetings (e.g. arranging for meeting space, travel for EC members), collecting presentations from ExoPAG meetings and posting them on the web site, taking and distributing minutes of the ExoPAG meetings, etc.

## DURATION

The ExoPAG may be terminated at the discretion of the Astrophysics Division Director. If the ExoPAG terminates, the ExoPAG terms of reference also terminate, and all appointments to the ExoPAG EC terminate.



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Paul Hertz  
Astrophysics Division Director  
Science Missions Directorate

3/6/17

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Date

## Appendix A: Science Analysis Groups (SAGs)

In order to address a specific ExEP issue, a SAG may be established in order to perform analysis and report findings to the ExoPAG. SAGs are established with the approval of the Astrophysics Division Director and the concurrence of the ExoPAG chair, the ExEP Program Scientist, and the ExEP Chief Scientist. The Astrophysics Division Director may consult with the Astrophysics Advisory Committee before approving the establishment of a SAG.

Once the findings are reported, the SAG is closed out. The report may take the form of a white paper, or a presentation to the ExoPAG. The Astrophysics Division Director may require the SAG report to be accepted by the Astrophysics Advisory Committee before it is closed out.

The Chair of a SAG is either a member of the ExoPAG EC or a member of the wider ExoPAG, and membership is drawn from the EC and the wider ExoPAG community.

## Appendix B: Science Interest Groups (SIGs)

In order to collect community input and address longer-term community interests, SIGs may be established. A SIG will have a single, well-defined area of interest (for example, a wavelength band or science topic). SIGs will report to the ExoPAG at each face-to-face meeting. SIGs are established with the approval of the Astrophysics Division Director and the concurrence of the ExoPAG chair, the ExEP Program Scientist, and the ExEP Chief Scientist. The Astrophysics Division Director may consult with the Astrophysics Advisory Committee before approving the establishment of a SIG.

The Chair of a SIG is either a member of the ExoPAG EC or a member of the wider ExoPAG, and membership is drawn from the EC and the wider ExoPAG community.