



NASA Astrophysics Program Analysis Groups

Presentation to the AAAC
NSF HQ

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Topics

- Raison d'être for Program Analysis Groups
 - Formation and Structure
 - Potential utility to the AAAC

Nota bene:

These are Program *Analysis* (not *Advisory*) Groups. They strictly do not provide advice, recommendations, or consensus opinions.



Program Analysis Groups (PAGs)

- Astrophysicia est omnis divisa in partes tres:
 - Exoplanet Exploration Program
 - Cosmic Origins Program
 - Physics of the Universe Program
 - (Astrophysics Explorer Program)
 - (Astrophysics Research Program)
- There are three corresponding PAGs:
 - ExoPAG (Exoplanet Exploration PAG)
 - CORPAG (Cosmic Origins PAG)
 - PhysPAG (Physics of the Universe PAG)



Rationale for PAGs (1/2)

- Community-based forum for analysis in support of Program objectives, planning, activity prioritization.
- Provides the community with regular opportunities to provide unsolicited input to NASA via the NAC.
- Can be tasked by SMD, NAC Science Committee, and Astrophysics Subcommittee to provide analysis on specific topics, for which the PAG can form ad hoc Study Groups constituted of community members.
- Specific roles for a PAG include:
 - Articulate key science drivers for research;
 - Regularly evaluate science goals, objectives, investigations and required measurements



Rational for PAGs (2/2)

- Evaluate capability of program's missions for achieving evolving science goals
- Articulate focus areas for needed technologies
- Identify activities that enhance the PCOS mission portfolio:
 - Ground-based observations
 - Theory and modeling
 - Laboratory astrophysics
 - Suborbital investigations
 - Data archiving
- Findings and analyses of the PAGs are reported to the NAC and its Astrophysics Subcommittee.



PAG Structure

- PAG Chairs = members of NAC/Astrophysics Subcommittee
 - Appointed by SMD AA following consultation with Astrophysics DD, Chairs of the NAC, Science Committee and Astrophysics Subcommittee.
 - ExoPAG Chair = Jim Kasting
 - CORPAG Chair = TBD
 - PhysPAG Chair = TBD
- PAG Executive Committee members:
 - Responsibilities include collecting and summarizing community input for reporting to the NAC
 - Solicited by Dear Colleague letter
 - Appointed by Astrophysics DD, with concurrence of the SMD AA, the relevant PAG, NAC Science Committee and Astrophysics Subcommittee Chairs
 - Balanced over both functional expertise (observation, theory, instrumentation) and science disciplines
 - Nominally appointed for three years



PAG Structure (continued)

- PAG Executive Secretary
 - A NASA civil servant appointed by the Astrophysics DD
 - Assists Chair and acts as single POC within NASA
- *Main body of the PAG is the attending community at the periodic meetings.*
- Meet twice a year or more frequently as needed. The PAG Chair sets the meeting schedule in consultation with the Executive Committee.



Current Status of PAGs

- The PhysPAG or CORPAG are waiting to receive approval from the NAC for their formation.
- The ExoPAG, approved and selected earlier, had its first meeting at the Jan 2010 AAS meeting.
- The first PhysPAG, CORPAG public meeting will likely occur after the Astro 2010 report has been issued (Sept 2010).



Possible Utility to the AAAC?

- PAGs provide a mechanism to interact with and receive information from the community.
- PAGs may be directed to form *ad hoc* study groups that provide analysis and findings.
- PAG reports will be publicly available and may occasionally provide useful community-based input to the AAAC.
- PAGs cannot replace AAAC Task Forces since the Task Force reports, after approval by the AAAC, constitute formal advice to the agencies.