

# PhysPAG

Face-to-face Meeting  
8 Jan 2012 AAS

S. Ritz

See

<http://pcos.gsfc.nasa.gov/physpag.php>

Includes email sign-up for news and announcements. Reports from previous meetings, links to APS reports, ...

...and see the booth downstairs!

The screenshot shows the NASA website for the Physics of the Cosmos Program Analysis Group (PhysPAG). The header includes the NASA logo and the text "National Aeronautics and Space Administration" and "Goddard Space Flight Center". Below the header is a navigation menu with tabs for OVERVIEW, PROJECTS, SCIENCE, TECHNOLOGY, STUDIES, and PROGRAM OFFICE. The main content area is titled "Physics of the Cosmos" and "PhysPAG". It features several sections: "Links" with a list of related groups; "Objective" describing the group's purpose; "Program News" with dates and links to announcements; "Upcoming Meetings" for January 2012; "Past Meetings" for 2011; "PhysPAG Announcements" with a sign-up link; "Executive Committee" listing members like Steve Ritz and Jason Rhodes; "Contact" information for Rita Sambruna; "Project News" with links to Chandra, Fermi, and Planck news; and "Related Missions" including XMM-Newton.

# Executive Committee

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- Roger Brissenden (CfA)
- Shaul Hanany (Minnesota)
- Liz Hays (GSFC)
- Guido Mueller (UFL)
- Jason Rhodes (JPL)
- Steve Ritz (UCSC), chair

*physpag-ec@bigbang.gsfc.nasa.gov*

- Most recent EC activities:
  - Ongoing SAG work
  - PCOS newsletter feedback
  - Next steps and meeting planning

# Acronyms

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- APS = Astrophysics Subcommittee of the NASA Advisory Committee (NAC) Science Committee
- APS = American Physical Society

# Goals of this meeting

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- Reports from SAGs and next steps
- New work
- Where/when should PhysPAG be meeting?
  - continue to expand community participation
  - PCOS is not “a community”
- What’s missing?

# Some additional pending questions

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- Meetings: there are four main options for our next face-to-face meetings:
  - meet at the April APS meeting. This has the advantage of pulling in the part of the community not well represented at the AAS meeting (GW and CMB, especially), although the timing has some drawbacks;
  - meet at the Anchorage AAS meeting in June. This has the advantage of reaching some part of the wider astronomical community but may not be well attended by the PCOS community (for instance, HEAD doesn't generally have sessions at summer AAS). It is also likely to be just before the X-ray and GW study results are released.
  - attend various topical meetings
  - meet in Washington DC in the July-August timeframe. At that time, the current GW and X-ray studies will be complete, and we would hear the results along with members of the community. This could either be a meeting at HQ or more of a workshop somewhere else nearby, or some combination of the two. This would solve a problem of civil servant travel restrictions in this fiscal year, as well as help to keep PCOS community input visible. An obvious drawback is that this would serve DC-area but might lose broader community input. If we went with this option, we would be particularly careful to have the subsequent meetings in other venues.
- Consider whether/when to spin up SAGs for GW and X-rays. After the current studies are complete, these two communities may need a forum of the kind the SAGs can offer to move forward. If so, develop a specific proposal (near-term goals and deliverables, candidate names for participants, timelines) for both SAGs so we can have them in place by June. Thoughts?
- Connections to WFIRST
- ...

# Agenda

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10:00 Meeting start, introductions, etc. - Steve, all

10:05 News from HQ - Rita et al (10+15)

10:30 TechSAG

- + update - Roger (5)
- + how TechSAG and IPSAG technology inputs are being used - Jackie (5)
- + discussions, next steps - Roger, Jackie, all (10)

10:50 IPSAG

- + update and statement of issues- Jamie Bock (10)
- + IP tech needs for mid-decade and overlap with x-ray, optical and sub-mm - Kent Irwin (15)
- + discussion actions, statements - Jamie, all (10)

11:25 GammaSAG proposal and first steps - Liz, Julie McEnery, all (15)

11:40 PCOS Program Office report, use of RFIs, etc. - Mooni (10+10)

**12:00-13:00 break for lunch, informal discussions**

13:00 Focus topic: X-ray opportunities in a changing landscape

- + NASA study, December Workshop, and the X-ray mission landscape - Rob Petre (25+25)
- + ATHENA plans - Nick White (20+5)
- + Summary, actions, statements - Roger, all (15)

14:30-14:45 break

14:45 Focus topic: GW opportunities in a changing landscape

- + mHz GW Science as a function of sensitivity - Tyson Littenberg (20+5)
- + Status of eLISA/NGO - Karsten Danzmann (20+5)
- + Report on the RFI responses, workshop, and future plans - Tuck Stebbins (20 + 5)
- + Summary, actions, statements - Guido, all (15)

16:15 AOB

16:30 Meeting summary, plans for next meetings - Steve, all

17:00 adjourn

# Discussion, Results (1)

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- Overall statement draft:
  - *Scientifically and technically, PCOS opportunities continue to be extremely exciting. In all areas of PCOS science discussed, the very limited and uncertain budget situation severely reduces the program developed in connection with the NWNH Decadal Survey. New focal points are needed for community organization.*
- Gamma SAG
  - Agreed to present proposal to the APS at the February meeting.
- TechSAG and Communication SAG work moves to new SAGs.
  - The EC will coordinate across groups as needed, including for the annual refresh of the tech plan and to help ensure completeness in areas not covered by the SAGs.

## Discussion, Results (2)

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- X-ray SAG
  - Agreed an X-ray SAG should be formed so that it is operating on the timescale of the completion of the current study in the June/ July timeframe and as planning for the Europe-led ATHENA mission progresses. Proposal to be drafted and discussed by email, complete by 31 January in time for February APS.
  - Deliverables include inputs, and overall community vision, to CAA, as well as X-ray technology development analysis.
  - *The current CST study is an effective near-term focal point for the X-ray community. PhysPAG looks forward to the public release of the report in June.*



## Discussion, Results (3)

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- GW SAG
  - Agreed a GW SAG should be formed so that it is operating on the timescale of the completion of the current study in the June/ July timeframe and as planning for the Europe-led eLISA/NGO mission progresses. Proposal to be drafted and discussed by email, complete by 31 January in time for February APS.
  - Deliverables include tracking developments in GW science, data analysis, opportunities, and technology.
  - *The current study is an effective near-term focal point for the GW community. PhysPAG looks forward to the public release of the report in June.*

# Discussion, Results (4)

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- IPSAG
  - *The PhysPAG very much appreciates the excellent work on the science and technology developments necessary for defining the Inflation Probe mission featured in the NWNH Decadal Survey. The NWNH report recommended a mid-decade review to evaluate the evolving scientific case and technology readiness of the Inflation Probe mission. The current budget situation endangers readiness for this review.*
- Next meetings:
  - informational presence at April APS this year only
  - plan a July-August F2F meeting in DC that includes reports from the X-ray and GW study teams and likely F2F meetings of the four SAGs.
- Other business: what's missing
  - Different kinds of advocacy?
  - Help review outreach materials produced by PCOS programs.