

IPSAG One-Day Workshop, Aug. 15, 2012

Information + Registration at:

<http://pcos.gsfc.nasa.gov/phypag/phypag-workshop-2012.php>

Background

The Physics of the Cosmos Program Analysis Group (PhysPAG) is organizing a three-day meeting between Aug. 14 and 16. As part of this gathering there will be meetings of the various Science Analysis Groups (SAGs). The Inflation Probe SAG (IPSAG) is planning a one-day meeting on Aug. 15. Conclusions of this meeting will be relayed to the PhysPAG and to NASA officials on the morning of Aug. 16. All community members are invited for the entire PhysPAG meeting.

The Astro2010 Astronomy and Astrophysics Decadal Survey committee recommended funding for technology toward a future Inflation Probe (IP). It also recommended a review of the science and technology readiness for the IP by mid-decade. Much of the recommended technology funding has not yet materialized, partly because of NASA budget constraints and partly because NASA set lower priority for funding IP technology development relative to X-ray and gravitational wave activities.

Goals

The goals of the one-day meeting are to discuss what preparations our community should make prior to the deliberations of the mid-decade review committee and how to engage NASA more effectively in funding technology development for the IP.

Three specific deliverables will be discussed in the meeting:

1. A call to NASA to enhance the priority of funding IP technology development.
2. A call to NASA to fund another round of mission concept studies well in advance of the mid-decade review,
3. A list of specific suggestions for means of evaluating the status of IP preparations at the mid-decade review, and for follow-up actions.

Attendees

All community members are invited to participate. There are no registration fees. We are inviting NASA headquarters officials and members of the PCOS program office at Goddard. Paul Hertz, Head of the Astrophysics Division at NASA Science Directorate will be available on Tuesday Aug. 16 to hear summaries of the meeting and may respond to questions raised by community members.

Information + Registration

More information about the workshop is posted at <http://pcos.gsfc.nasa.gov/phypag/phypag-workshop-2012.php>. Because of room size limitations the maximum number of attendees is 50. Please register as soon as possible at https://www.lpi.usra.edu/meetings/phypag2012_reg/

Agenda

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| 8:00 – 8:30 | Coffee |
| 8:30 – 8:45 | Background (15 min) - Hanany

Bring the audience up to speed on recent IP history, decadal panel recommendations, status within NASA HQ, Goals of Workshop. |
| 8:45 – 9:35 | Planck (40 min) – Lawrence + Crill
Discussion (10 min)

What have we learned from Planck about technology, foregrounds, calibration and systematics. |
| 9:35 – 10:35 | Progress by sub-orbitals:
Balloons (25 min) - Jones
Ground-based (20 min) – Lee
Discussion (15 min)

What progress can we anticipate by sub-orbitals by the time of the mid-decade review? What else do we want to achieve by mid-decade and later in term of sub-orbital experiments? |
| 10:35 – 11:00 | Break |
| 11:00 – 12:00 | Meeting with Paul Hertz |
| 12:00 – 1:15 | Lunch break |
| 1:15 – 2:25 | CORE (15 min) - de Bernardis,
EPIC (15 min) - Bock,
PIXIE (15 min) - Kogut,
LiteBIRD (15 min) – Hazumi
Discussion (10 min) |
| 2:25 – 3:20 | Technology development
Detector Arrays and Focal Plane Coupling (25 min) - Moseley
Multiplexing (15 min)- Irwin
Discussion (15 min)

What are the key immediate areas for development? Where is the technology heading in the near term (<2015) and mid-term (>2015)? |
| 3:20 – 3:30 | Break |
| 3:30 – 4:10 | NASA HQ and Program office |

Status within NASA HQ, relation to PCOS program office in Goddard, status of NASA funding for technology development and experiments, technology development priorities within NASA, agencies' plans for mid-decade review

4:10 – 5:00

Discussion + draft of summary statements

Status of Technology Development Funding in the coming years;

What shape should the mid-decade review take? What components should go into the review? When would such a review be appropriate? What metrics should be applied for science and technology? Should we ask for a review of the CMB by itself, or is it part of a larger pcos review?

Should we have another round of mission studies? When? What is a reasonable level of funding for such a mission study?