

PhysPAG Technology Study Analysis Group (SAG) Status

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for the TechSAG team

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Technology SAG

- TechSAG formed to provide quantitative analysis and assessment to NASA via the Astrophysics Subcommittee (APS) in regard to PCOS technology needs
- SAG formed and tasks defined at the Seattle AAS
- Tasks approved by the APS at Feb 2011 meeting:
 - Conduct a review of NASA technology roadmaps from PCOS perspective and provide input to the present NRC review (complete)
 - PCOS Technology development assessment (complete)
- Community input gathering activity, not a critical or prioritized assessment

Technology SAG Membership

- Present Technology SAG membership:
 - Jay Bookbinder (CfA)
 - Roger Brissenden (chair; CfA)
 - Randall Correll (Ball)
 - Kathy Flanagan (STScI)
 - Liz Hays (GSFC)
 - Shaul Hanany (UMN)
 - Kent Irwin (NIST)
 - Guido Mueller (U. Florida)
 - Steve Murray (JHU)
 - Jason Rhodes (JPL)
 - Dan Schwartz (CfA)
 - Colleen Wilson-Hodge (MSFC)
 - Kent Wood (NRL)
 - PCOS Program Office (GSFC): Jean Cottam*, Carl Stahl, Jackie Townsend
 - NASA HQ Observers: Jaya Bajpayee, Mike Moore, Rita Sambruna
- Membership open to the community via the PhysPAG website:
<http://pcos.gsfc.nasa.gov/physpag.php>

* Started new position with NSF in Dec 2011

NRC Technology Roadmap Task

- NRC reviewed NASA Office of the Chief Technologist (OCT) technology road maps
 - Workshops held to solicit community input
 - Deadline for input via web forms, 4/15/11
- PhysPAG Technology SAG reviewed roadmaps for gaps against PCOS needs and provided NRC input

NRC Technology Roadmap Task

- SAG Telecons held 2/25, 3/10, 3/30
- Updated 2005 Technology Roadmap to provide framework
- Assessed PCOS technology areas against Draft Science Instruments, Observatories, and Sensor Systems Roadmap (TA08) for gaps and required updates
- Presented roadmap and inputs to the Astrophysics Subcommittee on 4/7: approved
- Submitted inputs by 4/15 to NRC study website

PCOS Technology Assessment Task

- Assessment intended for PCOS Program office for Program Annual Technology Report
- Draft for Community comment placed on web July 27
- Community input received by Aug 12 deadline; 14 inputs received
- Comments received on the technology roadmap (3), specific technology tables (6), and general comments (5)
- Updates made in response to Community input included adding:
 - Technology for a hard X-ray NuSTAR follow-on mission
 - Detectors for wide-field X-ray surveys
 - Alternative technology for X-ray timing science
 - 21 cm cosmology array (with overlap with COPAG science)
 - Future computation and processing needs to support the new technologies
 - Broadening of technology categories to clarify inclusion for Explorers

PCOS Technology Assessment Task

- Revision completed and APS approved Oct 19
- Assessment materials provided to the PCOS office and placed on TechSAG website Nov 4:
<http://pcos.gsfc.nasa.gov/sags/techsag.php>
- Material included in Program Annual Technology Report
- Recommend an annual update as an ongoing task for the PhysPAG in consultation with PCOS office on format

Thanks to all TechSAG members for their hard work and the PCOS office for their support