Cosmic Origins Program Analysis Group (COPAG) Report to Astrophysics Advisory Committee (APAC) October 13 & 15

Dr. Margaret Meixner
Chair, Cosmic Origins Program Executive Committee
## COPAG Executive Committee

<table>
<thead>
<tr>
<th>Name</th>
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Join the Cosmic Origins (COR) Analysis Group (COPAG) Executive Committee (EC) or a lead a Science Interest Group!

WHY?
- The EC provides analysis of community input for the purposes of informing NASA of community feedback on its programs.
- These analyses can have an impact: e.g. ADAP offerings, the Great Observatories report.
- Coming soon: Decadal Survey results, analysis of those results will be interesting, impactful and fun to discuss.
- New Science Interest Groups (SIGs): Galaxies, ISM and planet formation, Stars and stellar populations

WHAT?
- The EC is a diverse and inclusive body and the diversity of thought from their different backgrounds is critical to the discussions and analysis.
- EC members span the breadth of COR science, technology and the astrophysics community.
- We aim for ~12 members at any given time
- The committee reports to NASA HQ Astrophysics Division

HOW?
- COPAG EC has a rolling deadline for nominations and self-nominations:
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COPAG EC has a rolling application form, and we asked for applications by Oct. 7 to address vacancies. Those applications are under review by Tollestrup.

The 3 SIGs mirror the 5 Decadal Prioritization Panels. The 2 STIGs mirror the 3 APRA+SAT funding portfolios.

The SIGs that will analyze the Decadal & science panel reports to identify science gaps in achieving the Decadal recommendations.

They will closely work with the STIGs who will identify the technology gaps that follow from the science gaps in achieving the Decadal recommendations.
Science/Technology Analysis Groups (S/TAGs) are **short term** groups that are spun off when a specific analysis and a coherent effort is needed.

Science Interest Groups (SIGs) **mirror** Decadal Panels

- Galaxies
- ISM & Planet formation
- Stars, Sun and Stellar Pops

Science/Technology Interest Groups (STIGs) **mirror** HQ APRA bins

- Infrared / Radio
- Ultraviolet / Optical

The Astrophysics Community
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The Astrophysics Community
Annual Change of Personnel

- Farrah, Kartaltepe, Murphy, Rangwala, Smith rotated off; Jake Connors (NIST), Arielle Moullet (SOFIA SC), Roberta Paladini (IPAC), and Volker Tolls (CfA) rotated on.

Continuing the webinar series

- Continuing cadence of ~1 talk/month after summer hiatus.
- Attendance has been high, between 30 and 60 scientists from around the globe.
- All recordings posted to YouTube channel and website.

Continuing Newsletter

- Released latest version in Aug 2021; next release planned Jan 2022.

Organizing virtual workshop “The Impacts of Astro2020 on IR Astrophysics”, date TBD.

- Opportunity for the community to synthesize the priorities from the Astro2020 review.
- Currently in planning stages; waiting for decadal release before finalizing schedule.
- Not clear how this will relate to our usual splinter session at the winter AAS meeting.
UVSTIG QUEST Seminar Activity

- UVSTIG -- Quorum for Ultraviolet Exploration of Science and Technology (QUEST)
  - Community forum for science updates and technical sharing of “what works, what doesn’t”
  - Develop prioritization metrics for the UV/Vis components of Cosmic Origins Science guided by decadal debrief
  - Presentations on monthly basis on an available Thursday at 15:00 ET
  - Intent to pair science talks with technology talks
  - Seminar videos posted to website (url above)

  - QUEST04 -- 27 August 2021 – 27 attendees
    - Brad Cenko (GSFC) – DORADO: Wide-field UV Imaging for the Multi-Messenger Era
  - QUEST05 -- 30 Sept 2021 – 37 attendees
    - Carlos Vargas & Haeun Chung (UAz) – Aspera: Revealing the Diffuse Universe
  - QUEST06 – 28 Oct 2021 –
    - James Rhoads (GSFC) – ULTRASAT
  - QUEST07 -- 18 Nov 2021
    - Kevin France (CU) – TBD

- Also held a kickoff meeting on 9 Sept 2021 to discuss logistics and content for 239 AAS UVSTIG Splinter Session
  - Tentative Theme – Decadal Impact on UV Science Priorities & Technology Maturation
  - Google docs page created to track UV component TRLs
Stars Science Interest Group - Activity Highlights

Yuan-Sen Ting (Chair)

**Personnel**
- Formed transitional leadership council - a panel of 9 top scientists in various areas related to stars
- Currently, >70 scientists subscribed to the Stars SIG

**Webinar series**
- Hosting seminar once in every two weeks - starting this Friday (10/08)
- Covering 8 major facilities/research areas: JWST, Rubin, TESS, Gaia, Roman, 30m ELT, future multi-object spectrograph, hydrodynamics simulation
- All recording and slides will be posted on the Stars SIG homepage

**Townhall**
- Hosting monthly town halls to discuss the Decadal survey, starting on 11/09

**Virtual Meeting**
- Hosting a virtual workshop in early 2022
- Will be part of AAS splinter session in 2022
Further analysis by COPAG will be important to NASA. COPAG is creating 3 new Science Interest Groups that parallel the Decadal Panels:

- Galaxies
- ISM and planet formation
- Stars, Sun and Stellar Populations

COPAG has 2 Science and Technology Interest Groups:

- IRSTIG
- UVSTIG

Interested in leading or joining one of these SIGs or STIGs?

Fill out this form: [https://forms.gle/X1qUccRJk9Jy94iN6](https://forms.gle/X1qUccRJk9Jy94iN6) or please contact any of us directly.
Commitment to Diversity, Equity and Inclusion

Society for Advancing Chicanos/Hispanics & Native Americans in Science (SACNAS)
National Diversity in STEM Digital Conference

- Special session (joint with Physics of the Cosmos, Exoplanet Exploration, GSFC/Code 660)
  - Janice Lee will present a talk.
- Virtual booth

National Society of Black Physicists Annual Meeting

- Gold sponsorship
  - COR, PCOS, GSFC/Code 660
  - NASA SMD Divisions
- Virtual booth
- Special session
  - COR, PCOS, ExEP
  - NASA Astrophysics (GSFC/Code 660)

https://www.nasa.gov/careers/our-mission-and-values
# AAS: submitted splinter sessions, final program in progress

<table>
<thead>
<tr>
<th>Session Name</th>
<th>Date (01/09 - 01/13)</th>
<th>Start Time (local time)</th>
<th>End Time (local time)</th>
<th>Estimated attendance</th>
<th>Organizer/Requestor</th>
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<tbody>
<tr>
<td>NASA Infrared Science &amp; Technology Interest Group (IR STIG)</td>
<td>Monday, Jan 10</td>
<td>10:00</td>
<td>11:30</td>
<td>100</td>
<td>Meredith MacGregor</td>
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<tr>
<td>NASA Joint Program Analysis Group (PAG)</td>
<td>Monday, Jan 10</td>
<td>12:00</td>
<td>1:30</td>
<td>200</td>
<td>Peter Kurczynski</td>
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<tr>
<td>NASA Stars Science Interest Group (Stars SIG)</td>
<td>Monday, Jan 10</td>
<td>2:00</td>
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<td>Peter Kurczynski</td>
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<tr>
<td>NASA Ultraviolet-Visible Science &amp; Technology Interest Group (UV-STIG)</td>
<td>Tuesday, Jan 11</td>
<td>10:30</td>
<td>12:00</td>
<td>50</td>
<td>Jason Tumlinson</td>
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<td>NASA Interstellar Medium Science Interest Group (ISM SIG)</td>
<td>Wednesday, Jan 12</td>
<td>12:30</td>
<td>2:00</td>
<td>50</td>
<td>Sangeeta Malhotra</td>
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<tr>
<td>NASA Galaxies Science Interest Group (Galaxies SIG)</td>
<td>Wednesday, Jan 12</td>
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