CAA Report

November 4, 2020

Tom Greene & Vicky Kalogera, CAA Co-Chairs

CAA reports to the BPA and the SSB

Disclaimer: These slides represent a personal assessment of the issues discussed by the CAA. This document should not be cited or quoted because the views expressed do not necessarily reflect those of CAA, SSB, BPA, or the NRC.

CAA Roles & Responsibilities

- CAA reports to National Academies Board on Physics and Astronomy (BPA) and Space Studies Board (SSB).
- CAA is not the Decadal Survey committee, and it does not set policy for the Survey. It did help the National Academies and the Agencies in preparing for the Survey
- CAA is now focused on implementation of Astro2010 and its midterm assessment and monitoring ongoing agency projects and programs
- CAA also writes short reports as needed
- During the A&A Decadal Survey we have shifted to meetings/telecons "as needed"

Most recent meeting March 31 & April 1, 2020; No Fall 2020 meeting as we wait for Astro2020 Decadal Survey

https://www.nationalacademies.org/our-work/committee-on-astronomy-and-astrophysics

CAA Membership

Vassiliki (Vicky) Kalogera (NAS), Co-Chair, Northwestern University Thomas Greene, Co-Chair, NASA Ames Research Center Shaul Hanany, University of Minnesota Elizabeth Hays, NASA Goddard Space Flight Center Christopher F. McKee (NAS), University of California, Berkeley Jason Kalirai, Johns Hopkins Applied Physics Laboratory Jeffrey Kuhn, University of Hawaii Scott Ransom, National Radio Astronomy Observatory Kate Scholberg, Duke University Joseph Silk (NAS), Johns Hopkins University Alycia Weinberger, Carnegie Department of Terrestrial Magnetism A. Thomas Young (NAE), Lockheed Martin (Ret.)

- Lee Hartmann and Alexy Vikhlinin have completed their terms
- Two new members have been nominated and are pending approval

US Astronomy & Astrophysics Status

- Agencies have been updating the US community via Astro2020 presentations, Town Halls, FACA meetings
- Astro agencies are responding to COVID19 situation:
 - Ongoing grant solicitation, evaluation, review, administration
 - Some COVID grant extensions, but no new funding overall
 - Space observations continue uninterrupted
 - Most ground-based observations have restarted with limited science operations due to COVID protocols after 2 6 month closures. KPNO (Arizona) and ALMA (Chile) are preparing to restart observations.
- Rubin Observatory work is ongoing but has slowed
- JWST launch delayed from March to October 31, 2021
- Astro 2020 Decadal Survey ongoing. Report due Spring 2021 (delayed from Jan due to COVID-19)

Satellite Constellations Interference

- NSF-sponsored "Impact of Satellite Constellations" workshop held in June
 - Report with mitigations released August (C. Walker et al.)
- International Astronomical Union and UN Office for Outer Space Affairs jointly held a workshop in August
 - Will submit report to UN Committee on the Peaceful Uses of Outer Space
- Astro2020 working group on OIR and Radio Interference and had a public meeting in May
 - CAA member Scott Ransom is member of working group
 - Will report their findings and recommendations to the Astro2020 Steering Committee
- J. Lancaster of NASEM has communicated with the State Department
 - State Department is aware of the issues and is interacting with the UN and other groups on the topic

2020 Nobel Prize in Physics

 2020 Nobel Prize in Physics to R. Penrose (Oxford), A Ghez (UCLA), R. Genzel (UC Berkeley / MPE), for Black Hole discoveries



A. Ghez et al. UCLA Galactic Center orbits support supermassive black hole at center of our galaxy; Laser guide star observations made at Keck Observatory in Hawaii (and at European VLT in Chile by R. Genzel's group)

Discussion

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