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2022 July 05

Dr. Paul Hertz Astrophysics Director Science Missions Directorate National Aeronautics and Space Administration (NASA)

Dear Paul,

The NASA Astrophysics Advisory Committee (APAC) had a meeting on 2022 June 07 to receive and review the 2022 Astrophysics Senior Review Report (ASRR).

Dr. Hasan began the meeting by welcoming all the APAC members and explaining the committee's purpose. Dr. Hasan reminded APAC members who had conflicts of interest with specific topics on the agenda that they were allowed to listen to the presentation but could not participate in the committee's discussion as they are conflicted. Dr. Hasan then read aloud the Federal Advisory Committee Act (FACA) rules. Dr. Woodward then welcomed the members to the meeting, outlined the agenda, and reiterated some of the FACA and conflict of interest rules.

The APAC thanks the 2022 Astrophysics Senior Review Subcommittee, members of the individual Rest-of-Missions, Hubble, and Chandra committees, as well as all individuals associated with the mission under review and NASA management for their efforts.

The APAC has the following specific findings and recommendations in response to the presentations and subsequent discussions.

Findings:

The APAC accepts the 2022 Astrophysics Senior Review Subcommittee Report (ASRR).

The APAC endorses the 2022 ASRR assertion that the missions reviewed will continue to enable impactful science over the next five-year horizon and provide key capabilities to advance NASA Astrophysics Division (APD) strategic key science questions informed by Decadal Surveys.

Recommendations:

The APAC recommends that NASA APD continue to operate and support each mission and to adopt recommendations outlined in the 2022 ASRR.

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The APAC advises APD to implement the over-guide requests in the priority order (descending from Priority 1 to Priority 5), as described on page 9 of the 2022 ASRR, if enhanced support is budgetarily feasible.

The APAC recommends that APD strongly consider portfolio adjustments, including the delay of science opportunity, to implement over-guide requests to a minimum of Priority 3.

The APAC advises APD to adopt strategies that prioritize, if not enhance, guest observer team funding as mission over-guide resources are considered relative to mission infrastructure and operations whenever feasible.

The APAC recommends APD develop clear POMs and evaluation criteria to enable missions in future senior reviews to respond adequately and uniformly to Diversity, Equity, Inclusion, and Accessibility (DEIA) requirements and expectations.

The APAC advises that APD approach mission DEIA broadly and coherently, commensurate with Science Mission Directorate (SMD) and Agency 5th pillar efforts, such that structural change is organized under a single lead team.

The APAC recommends APD consider other points and comments raised by the Committee during the debrief to the APD Director and captured in the meeting minutes.

Sincerely,

Dr. Charles E. Woodward, APAC Chair (on behalf of the Committee) Professor, Minnesota Institute of Astrophysics – University of Minnesota woodw024@umn.edu 612-624-0254