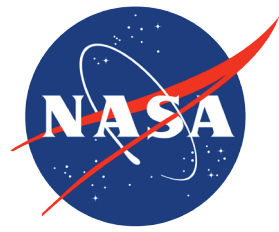


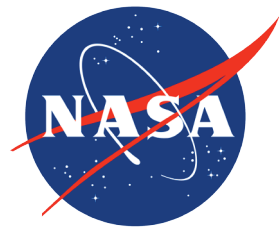
Astrophysics Advisory Committee Update

Mark Bautz, Interim APAC Vice-Chair
on behalf of
Feryal Özel, APAC Chair



Overview

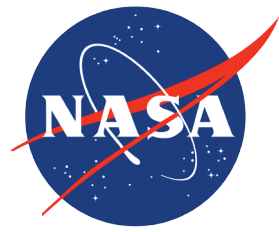
- Mission Activity
- Cross-divisional Science
- Decadal Survey Preparation



Missions 1/3

(per F. Özel's report to NAC)

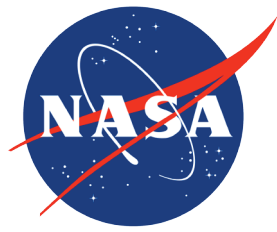
- **JWST** proceeding with new schedule after the replan
 - Team provides updates to APAC at every meeting
 - Found developments to be on target
 - Found steps were taken to minimize science impact of the delay
 - Continues to be concerned with the effect of budget overrun on rest of APD
- **WFIRST** proceeding with new requirements after WIETR
 - APAC heard how science requirements will be met after changes to the status of the coronagraph
 - Found steps taken to be sound



Missions (2/3)

(per F. Özel's report to NAC)

- Astrophysics Explorers program is vibrant
 - **NICER** (on ISS) is entering GO program
 - **TESS** has reported first science results
 - **Gehrels/Swift, NuSTAR, NICER & TESS** all preparing for Senior Review Spring 2019
 - **IXPE** is proceeding to development Phase C
 - MidEX & MO down-selection on-target for January, 2019
 - SMEX AO planned Spring 2019
- APAC strongly supports APD's robust commitment to this program

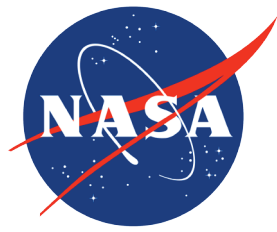


Missions (3/3)

(per F. Özel's report to NAC)

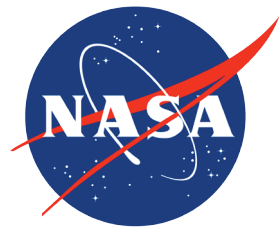
Stratospheric Observatory for IR Astronomy (SOFIA)

- Sofia is a joint US/German Airborne Observatory
- Prime mission ends at end of FY19
- Sofia is not participating in 2019 Senior Review
- **SOFIA** is being reviewed separately by NASA/DLR
 - APAC strongly concurs such a review is appropriate
 - APAC heard progress on the technical review
 - APAC is reviewing ToR for the science review



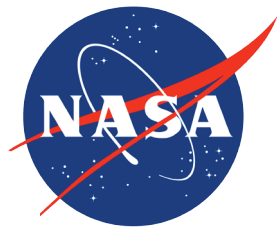
Cross-divisional Science

- APAC has taken up a discussion of any existing obstacles to inter-divisional science in last several meetings. Relevant presentations & discussions concerned:
 - SMD charge on high-risk/reward & interdisciplinary research
 - Nexus for Exoplanet System Science (NEXSS) initiative
 - Exoplanet & Astrobiology Science Strategy reports
 - APD Astro2020 preparation
- APAC is preparing a community survey
 - to be conducted through its three PAGs (EXO,COR, PHYS)
 - about science areas that may be impacted by existing division structure and proposal calls

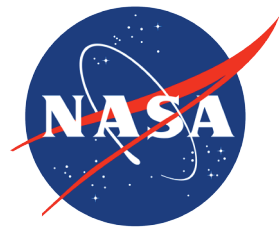


Astro 2020 Preparation

- APAC heard about NASA APD activities in preparation for the **Astro 2020 Decadal Survey**
 - Included précis/excerpts of Statement of Task
- APAC was pleased with APD's progress and further planning for the Decadal Survey
 - Funding 4 community-based large mission concept studies
 - Supporting Ten PI-led probe (medium) mission studies
 - Planning for external review of technical and cost credibility
 - Investing in targeted technology development
 - Informed by CAA guidance
- Discussion voiced strong support for Astro2020 approach to committee membership:
 - “should take advantage of full diversity of ... science community”



BONUS MATERIAL



Gateway

- APAC heard about NASA aspirations for Gateway from APD
 - Top agency priority is lunar exploration
 - SMD plans regular AO's for science payloads
 - Decadal SoT requires consideration of science synergies with NASA assets such as Gateway
- APAC recognizes importance of cross-divisional coordination for Gateway science