

Feb. 26 2020 AAAC Meeting Minutes, Teleconference

Attendees: Paul Hertz (NASA), Pat Knezek (NASA), Ralph Gaume (NSF), Eric Linder (DOE), Chris Davis (NSF), Renee Adonteng (NSF), Elizabeth Pentecost (NSF), Allison Farrow (NSF)

AAAC: Nancy Chanover, Andrew Connolly, Kyle Dawson, Ian Dell'Antonio, Scott Dodelson, Mansi Kasliwal, Eliza Kempton, Petrus Martens, Stephan Meyer, Priyamvada Natarajan, John O'Meara, Constance Rockosi, Deidre Shoemaker

Paul Hertz – NASA

FY21 budget for NASA astrophysics budget: Do not have an approved FY20 operations plan, so FY20 distribution not available until after Congress accepts the FY20 operations plan. FY20 doesn't look much different from FY19. Research, Technology, Infrastructure: supports community. Astrophysics including Webb is \$1.73 billion in FY20, up by \$233 million, includes WFIRST. FY20 appropriation specifies language for Hubble, SOFIA, Astrophysics research. FY20 Astrophysics budget is strongest in NASA history, adequate to fully fund the Webb launch for 2021. NASA goes to 70% commitment levels, so actual vs original budgets are regularly underspent.

FY21 budget request does not include WFIRST and proposes termination for SOFIA. Several budgets in the past have also proposed the termination of SOFIA. If terminated, SOFIA would require closeout funding in FY21; SOFIA is fully funded in FY20. External reviews were conducted for SOFIA, which recommendations have been implemented and can be followed with metrics established.

WFIRST: Over the last 2 years, WFIRST has not been included in the budget request, but has been included in the appropriation. WFIRST has been through many reviews, and confirmation review as a flagship mission will be this Friday, February 28 to begin its implementation phase of development. Coronagraph instrumentation technology demonstration is the most risky aspect of WFIRST project. Both instrument and WFIRST will have separate budget commitments.

Webb is still looking for a 2021 launch date. Webb needs to go through various tests, such as environmental tests and risks analyses.

Pioneers: Pioneers is a new initiative for NASA, consisting of competed SmallSats which will have a cost-cap of \$20 million each. First call will be in 2020. Community announcement has been distributed already, with a draft call distributed in the Spring, final call in the Fall 2020, and decisions made next year.

Ralph Gaume, NSF

FY19 was a good year for both facilities and grants. Facilities were fully funded in FY19 and the first quarter of FY20 was forward funded in many cases. It was the first year of funding for NSF's Big Idea – Windows on the Universe, which was approx. \$30 million.

The President's budget request is down 6% for FY20. Like Rubin, all AST facilities are fully-funded for this year's request, though research, education and infrastructure are down.

(Questions about MPS/OMA funding, with the forward funding by 3-months.)

Rubin operations began in 2019, though funding began in FY18. Full operations are expected to begin in early FY23.

DKIST's first image was released amid much celebration. DKIST will be fully operational this summer, on time, and within budget.

(Question about AAPF; response in that they have been awarded rather evenly for the past several years. GRFP is an NSF-wide decision to decrease awards.)

Eric Linder, DOE

Many decreases from FY19 to 20, specifically in high-energy physics. Several projects are expected to compete for Cosmic Frontier, so declining in funds, with operations taking over, though research in this area remains flat.

Science validation and mini surveys have been underway, including DESI.

Discussed the diversity, equity and inclusion program at DOE national laboratories, promoting demographics on their website. There is also a diversity and inclusion working group. There is a statement of commitment to include harassment.

There is a particle energy panel (P5, which is advancing Snowmass), that informs how much to fund for FY24.

DOE is looking forward to Astro2020 for future funding directions.

Pat Knezek, SMD Strategy

Gave an overview of SMD Big Data Task Force and the process of the working group. There were several drafts, report and finally a request for information, which followed the established guiding principles. There were several goals and strategies that were followed. There was a lot of talk on AI and Machine Learning, and need to hire Data Officers for SMD. AI may be coming from industry needs, not government, academia or community. As an exploration, there will be a call for potential partnerships with corporations like Amazon or Google.

John O'Meara, AAAC Chair

Requests for action on report writing between next week and March 15.