STUC April 2026 Report

STUC Membership

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1. Meeting Summary

The STUC met in person at STScI, April 22-23, 2026. At this meeting, we said farewell and thank you to **Matt Hayes**. We also welcomed three new members: **John Chisholm** (UT Austin), **Paul Crowther** (University of Sheffield), and **Grant Tremblay** (SAO/CfA). **Megan Reiter** served as chair for this meeting.

Hubble is now in its 37th year of operations and remains highly productive with over a thousand papers presenting new and archival data published in the last year. The Spring 2026 meeting covered a range of topics, including updates on Hubble's programmatic status, science results, budget environment, and the Rocky Worlds project. News from the meeting was also summarized in the June STScI Newsletter.

Specific recommendations from the meeting are outlined below. To start, the STUC would like to congratulate STScI and the Hubble Project for the continuing success of the observatory despite ongoing budget uncertainty. Furthermore, the Outreach and Communications teams continue to do an excellent job elevating Hubble science and educating the general public. Specifically, the STUC commends the Hubble teams for the following:

- The ESA Mission Extensions and new features on the ESA HST (eHST) archive
- The successful launch of the Hubble Spectroscopic Legacy Archive (HSLA) in November

- Excellent community tools produced by the Rocky Worlds program
- Winning a “Webby People’s Voice Award” for the Hearing Hubble site
- Restoring redundancy in the Science Instrument Command and Data Handler (S C&DH), to enable stable and efficient operations in the future

2. Concerns arising from the presentations

The STUC has several concerns about issues that challenge Hubble’s ability to continue producing excellent science, including:

- The Hubble 2030s Roadmap is very important but unfortunately, has a tight timeline for community input. We are concerned that the very short turnaround (and proximity to the Cycle 34 deadline) will make it challenging for users to produce a 4–5-page document within this timeframe and this will reduce community participation.
- We continue to be concerned about on-going financial pressures on the GO/AR grant programs due in part to the NASA Hubble Fellowship Program being fully funded through the Hubble mission budget even though a growing number of Fellows may not be engaging in Hubble science. We encourage NASA to develop a plan to maintain a long-term viable fellowship program given that 1) Hubble’s lifetime is finite and 2) the NHFP share of Hubble's budget has grown to the point where it is nearly half the entire Hubble science budget.
- We encourage clear and regular communication from STScI about the Community ToO program to engage and support the community. The STUC endorses the community spirit of the program and believes the science and observations are important. However, we are concerned about the time gap between when data are likely to be acquired and when community members will first have the opportunity to apply for funding, as well as the diminished level of funding available to non-GO programs and the disproportionate impact this could have on time-domain science. We recognize that no easy solutions exist.

3. Recommendations from the STUC (in no particular order):

Hubble 2030s Roadmap: We recommended that STScI provide an additional way for the community to offer input / enthusiasm for the Hubble 2030s roadmap. We suggested a short survey form with check boxes for instrument modes and short paragraphs for a science case and technical details. Finally, we encouraged STScI to remind the community about this call for input with another email and a post on the STScI website,

to ensure representation from as much of the community as possible. This has now been implemented; the survey is available at this link.

STIS 30th Anniversary: We are excited about the STIS 30-year anniversary. This is a great opportunity for outreach and could be considered a preview of what will be possible with the Habitable Worlds Observatory (HWO) in the future. We liked the idea of "30 things we would not know without STIS". With the recent public excitement around the Artemis Program, we also liked the idea of making connections with what is possible with human space flight, especially since STIS was both installed (SM2) and repaired (SM4) via shuttle-based servicing missions and a possible HST boost is on the table.

Community ToOs: To support the success of the program, the STUC has several recommendations:

- Provide in-house support to manage the program and moderate the workload for the relevant communities and ensure the best science.
- Establish a clear chain of command for who decides when / whether to trigger.
- Create a process by which proposed observations can be reviewed and updated as our knowledge changes between the time the program[s] are accepted and the observations trigger.
- Provide clear guidance and rules around proposals for follow-up observations.
- Search for alternate funding avenues for the time-domain community whose GO programs (and funding) will be absorbed into the Community ToO program.
- Provide a more explicit definition of the Community ToO program to make clear how it differs from existing ToO observation pathways. It is our understanding that the Community ToO program was a one-time solicitation, meant to provide/address the following:
    - Rare transients (ensures that a program is available)
    - Multi cycle (beyond the current capability)
    - Quicker response (quicker than DDT)
    - Community effort (coordination of competing teams)
    - Legacy (public data)

  We encourage STScI to give a complete picture of the "community effort" aspect when announcing the selected programs.

Time-sensitive ToOs: We suggest a committee that will commit to reviewing time-sensitive DD proposals on ~1-day timescales. We accept that there are still observatory overheads involved in determining the minimum turnaround time, but the review process timeframe is something that could be shortened.

Communication between Users Committees: The STUC recommends a formal method of communication between the Users Committees for different observatories (eg, HST, JWST, Roman). Options include joint meetings (perhaps once a year) or an executive committee of Committee Chairs to communicate about concerns relevant for the broader NASA astrophysics community.

Hubble Spectroscopic Legacy Archive: HSLA came online in November which was great to see. We had some concerns that the new implementation has lost some of the high-level overview / exploration capabilities with basic information - grating, S/N - that made the resource more accessible for novice users. We suggest that more curation on the front end and prepared data catalogs would make it easier to download and analyze the data with tools of choice. We acknowledge that STScI has plans to upgrade the front end with expected deployment in the autumn, using a similar search as is implemented with the ULLYSES and CLASSY archives. A stop-gap solution may be to use a static page of what is currently in the archive.

Managing the growing challenge of the proposal review process: We requested more clarity on eligibility to serve on the TAC - to help those of us trying to nominate replacements and to make it easier for people to self-nominate to serve. A TAC volunteer form exists, linked here, and people should feel free to circulate.

We recognise the challenge that STScI is facing with a growing number of proposals to review, and persistent challenges with panelist recruitment. We suggest STScI continue to work on ways to improve the proposal process to alleviate the burden on STScI and TAC participants and to please keep us updated.

Artificial Intelligence: We clarified that the STUC does not entirely reject the use of AI within the proposal process. We support the purchase of a trained model to use in-house provided that it has the necessary data / intellectual property protections in place. It may be possible to make such an AI tool available to reviewers who would wish to use it as a tool for language polishing in their reviews, for example, although it is not clear that this is necessary or even desired.

We strongly encourage clear and concise communication with the community on both ends of the proposal process (for both proposers and reviewers) about *ethical* use of AI/LLMs to protect the integrity of the proposal process. In particular, we encourage a reminder to reviewers that providing someone else's proposal to a public LLM is unethical, although we acknowledge that policing people's behavior is extremely difficult. We suggest that STScI be extremely clear on acceptable use of AI for proposals and review

and clarify how the requested AI statements may be used within the review process. We acknowledge that this is a hard problem with no easy answers; however, this is also an opportunity to lead - as STScI has done in the past with Dual Anonymous Peer Review, which is widely acknowledged as a gold standard of reviewing.

We are also concerned that the use of AI may lead to an increase in the number of proposals submitted, which will put further pressure on the already strained TAC recruitment process. Thus, changes to STScI's AI usage policy should inform changes to the proposal review process, and vice versa.

Finally, we suggest asking the community how they are using / thinking about AI in the post-proposal and post-TAC questionnaires.

Support for a boost for Hubble: We are hugely enthusiastic about the possibility of an orbital boost for Hubble, and we fully support both this initiative and also funding the observatory at a sustainable level throughout the 2030s, significantly alleviating the gap between the high-resolution UV capabilities of Hubble and HWO.