



**STScI** | SPACE TELESCOPE  
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

# HST Cycle 26 TAC Processes

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## Background

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- HST schedule adjusted to accommodate JWST Cycle 1 TAC (6/2018 for 10/2018 launch)
  - Cycle 25 TAC in June 2017 “pre-allocated” Cycle 26 to Small GO and regular AR programs
  - Cycle 26  $\Delta$ TAC in October 2018 adds the Medium & Large complement (plus Small/joint programs)
  - Prime goal: to mitigate the workload for the community
  - Process endorsed by the STUC in May 2016
- JWST TAC was postponed but the available HST resources (orbits) remain unchanged
- Cycle 26  $\Delta$ TAC involved 4 panels, originally with chair, vice-chair & ~9 panelists
  - Planets: Solar System, Exoplanets, Disks
  - Stellar Physics and Stellar Populations
  - AGN and IGM
  - Galaxies and Cosmology
- Each panel reviewed and ranked **all** proposals in that science area
  - Medium & small/joint proposals selected by the panels
  - Chairs & vice-chairs originally scheduled to vote only on large proposals
- Panel chair & vice-chairs form the super-TAC
  - Top-ranked Large/Treasury & AR Legacy proposals forwarded for discussion and ranking by the super-TAC



# Cycle 25 results – a reminder

## Summary Results

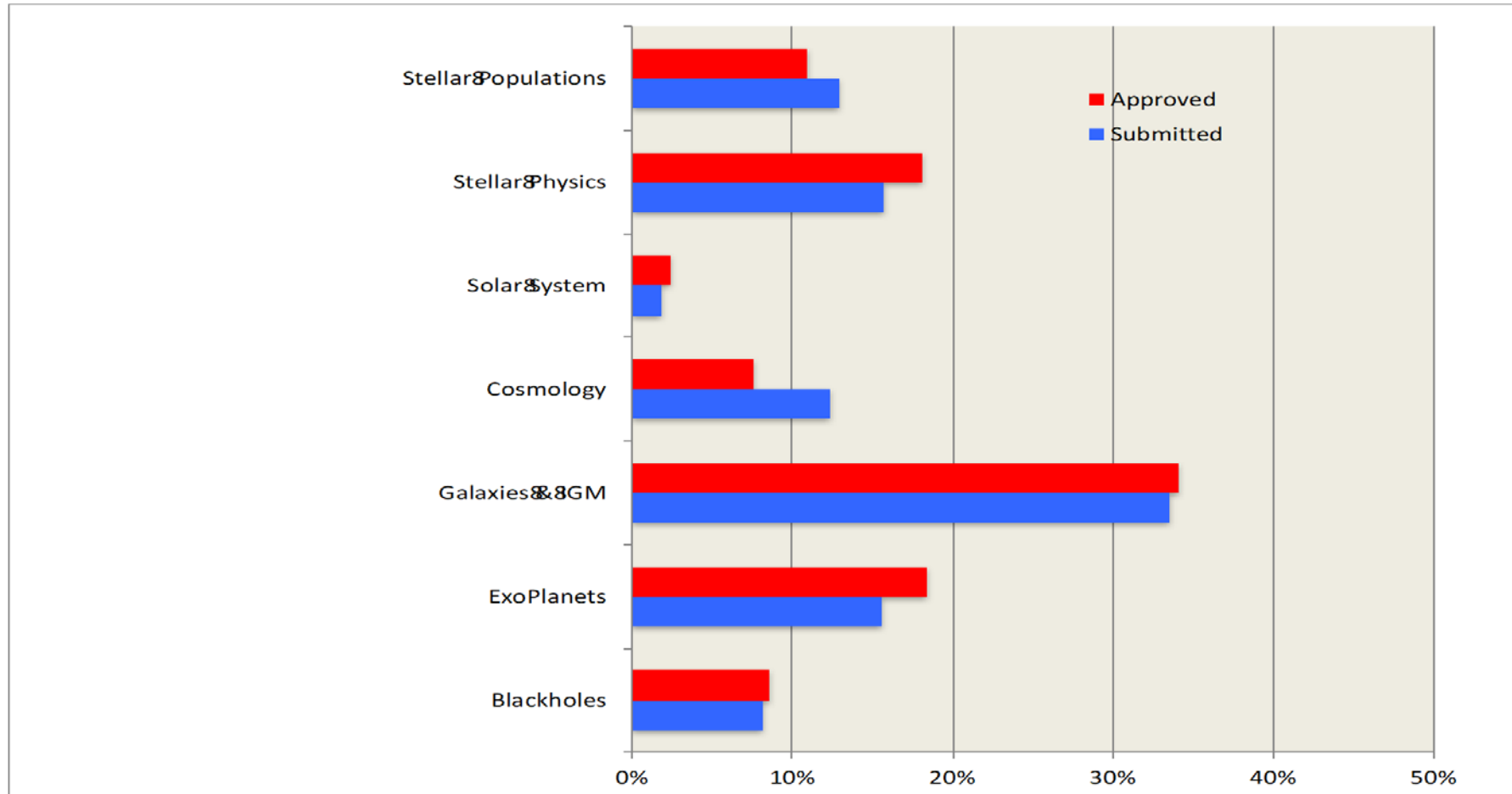
Proposals	<u>Requested</u>	<u>Approved</u>	<u>% Accepted</u>	<u>ESA Accepted</u>	<u>ESA % Total</u>
General Observer	971	271	27.9%	62	22.9%
Snapshot Archival	52	12	23.1%	3	25.0%
Research	105	31	29.5%	1	
AR Legacy	13	2	15.4%	0	
Theory	64	24	37.5%	0	
<b>Total Primary</b>	<b>1205</b>	<b>340</b>	<b>28.2%</b>	<b>66</b>	<b>23.3%</b>
<b>Orbits</b>	<b>23365</b>	<b>4900</b>	<b>21.0%</b>	<b>941</b>	<b>19.2%</b>

~1400 additional orbits for Cycle 26 small programs

ESA Orbits/Proposals is GO/Snap only;  
2 Orbits are from Calibration Pool  
Includes 1200 Pre-allocated orbits from Cycle 26



# Orbit allocation by science category – approved vs. requested





## Cycle 26 Phase I Schedule

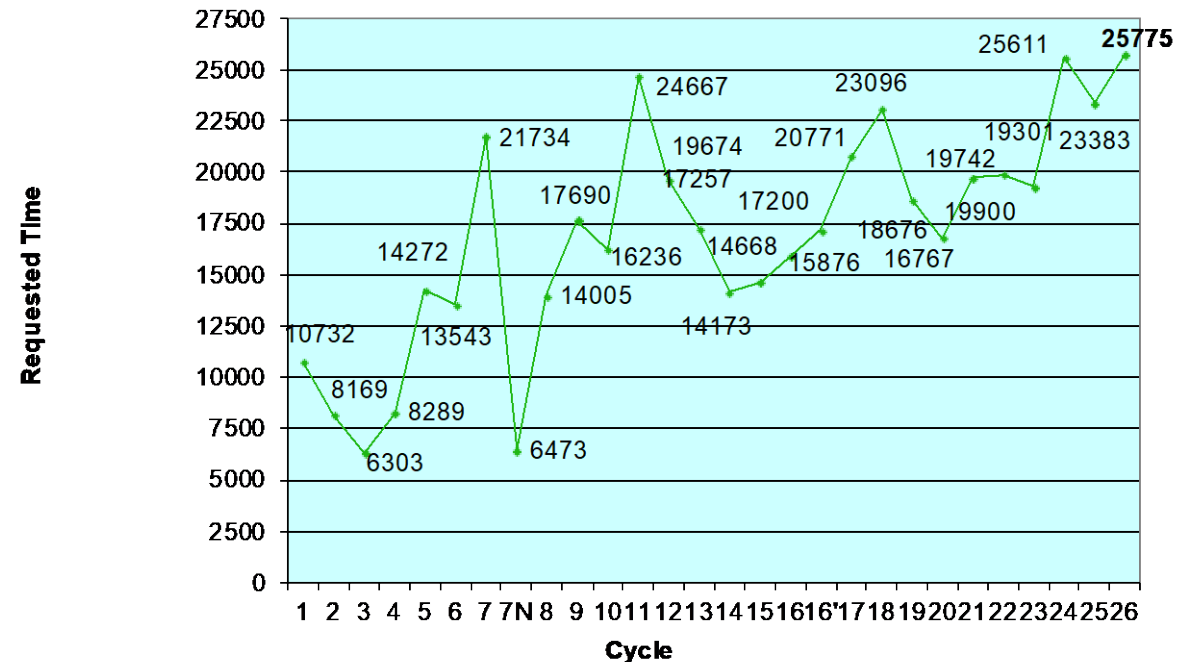
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- **May 10** CP release
- **August 17** Phase I deadline
- **August 30** Download available for panelists
- **October 2** Preliminary grades
- **October 9 - 10** TAC-Panels meet
- **October 11** Super-TAC meets
- **October 29** Director's Review
- **Mid-November** Notifications



# Logistics

- We received a total of 489 proposals at the proposal deadline
  - 372 NASA-led, 93 ESA-led, 24 led by PIs from other countries
  - 439 GO for 25,775 orbits, including
    - 75 Large for 10,057 orbits
    - 21 Treasury for 3,304 orbits (most Treasury are also Large)
    - 335 mediums for 15,292 orbits
    - 29 small/joint for 326 orbits
  - 50 Archival Legacy
- This exceeded expectations
  - 2 panels with ~150 proposals
  - 2 panels with ~90 proposals
- Needed to adjust process
  - Mitigate workload for panelists
  - Match to the review schedule





## Process adjustments

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- We made the following adjustments:
  - Asked the chairs and vice-chairs to participate in reviewing medium & small proposals
    - One chair resigned, alternate recruited, all others agreed
  - Added 2-4 new panelists to the panels with 150 proposals
    - Galaxies/Cosmology and Stellar Physics/Stellar Populations
  - Assigned 5 reviewers to each proposal for the preliminary grading
    - 45-60 reviews per person, ~15-20 as primary or secondary reviewer
  - Primary & secondary reviewers (& others) were encouraged to draft comments before the meeting
  - Once preliminary grades were collected, we produced rank ordered lists for each panel
    - Group in quintiles, sort within quintiles by ID and return to panels without average grades
    - Top quintile automatically put forward for discussion, each panelist was given the option of raising 1 proposal for discussion from a lower quintile
    - In the event, relatively few proposals were raised – each panel had between **25-40** proposals to discuss at the meeting (including Large, Treasury & Legacy)
    - As context, we anticipate accepting **4-6** medium proposals from each panel



## Dual anonymous system

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- Investigator names are not listed in the proposals sent for review
  - Based on a Working Group recommendation to the Director following extensive discussions with the community
- All proposers were required to follow common anonymizing guidelines
  - Extensive examples linked from the Cycle 26 Call e.g. refer to past work by the PI/co-I in 3<sup>rd</sup> person but still cite; refer to work in progress as “personal communication”, etc.
  - Intention is NOT to make it impossible to guess the authors of a proposal; rather, de-emphasise the scientists and focus on the science
  - Final step in the process is a review the “team expertise” + investigator list for recommended proposals to allow the panel to flag any teams that were regarded as unqualified for some reason
- Proposal vetting for non-compliance
  - We asked reviewers to flag proposals that seemed to contravene the guidelines
  - In the event, relatively few proposals were flagged, with only one egregious example





## Proposal discussions & outcomes

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- Conflicts
  - Panelists were flagged for conflicts based on people, not institutions
    - Personal involvement in the proposal by panelist, family member, recent Ph.d. student/adviser
    - Involvement of close collaborator/competitor as specified by panelist
  - All conflicts are now treated uniformly (major conflicts – leave room, don't vote)
- Levelers – one per panel
  - Senior community members from STScI & Goddard
  - Tasked with monitoring the discussion and redirecting if necessary
  - Intervention was rarely necessary – most panels self-policed
- Panel observers
  - Representatives from NASA HQ, Chandra, NOAO, NRAO to observe process + STScI & HST Project
  - Some rooms got a bit crowded
- Discussions completed on schedule
  - Panel reviews completed within 2 days
  - TAC review completed by mid-afternoon
- Outcomes
  - Director's Review on October 29<sup>th</sup>; final results will be circulated in early November



## Lessons Learned (1)

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- Don't schedule another  $\Delta$ TAC
  - Very high workload for panelists & super-TAC
  - Low success rate for proposals
  - Anecdotally, a significant number of inflated proposals (small  $\rightarrow$  medium)
  - Heightened number of personal conflicts without mirror panels
  - Complications introduced by the breadth of science in each panel
- Some silver linings
  - Likely to see more medium proposals in future cycles
  - Some panel chairs indicated that entering comments in advance led to more informed discussions



## Lessons Learned (2)

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- Dual Anonymous process
  - Need to provide greater clarity for future TACs on how conflicts are defined
    - All conflicts are individual – personal involvement, family member, recent student/advisor. Close collaborator
    - Currently those conflicts are primarily self-declared
    - Panelists have to take the conflicts on trust
    - We will establish clearer criteria for identifying those conflicts for the Cycle 27 TAC
  - Overall consensus was that the change went smoothly
    - Some panelists commented that the proposals were easier to review & better written
      - Still some who believe that we are excluding useful information on individual productivity
    - Outside observers commented that the discussion was almost exclusively on science rather than anecdotes about teams
    - **Most panels and the TAC were not interested in reviewing the team expertise and investigator list**