Phase I Schedule for Cycle 19

- Dec 6: CP release
- Jan 6: APT release
- February 25: Phase I deadline
- March 24: Download available for panelists
- May 11: Preliminary grades
- May 16 - 18: Panels meet
- May 18 - 20: TAC meets
- May 22 - 26: AAS Meeting
- May 30: Memorial Day
- May 31: Director’s Review
- June 15: Notifications
Proposals by Cycle

Cycle

# Submitted

[Graph showing the number of proposals submitted by cycle from 1 to 19, with peaks and troughs indicated by data points like 556, 1298, 1007.]
Summary statistics

- 1007 Proposals in Cycle 19 (1051 in Cycle 18)
  - 761 NASA & 200 ESA
- 798 (872) GO for 18,676 (23,096) orbits
  - 11 (12) Treasury for 1582 (1761) orbits
  - 37 (46) Large for 5286 (5738) orbits
- 65 (51) SNAPSHOT proposals for 6072 (4861) targets
- 144 (127) Archival proposals
- 4 Pure Parallel programs for 925 orbits
Review schedule

- Panels meet Monday morning → ~noon Wednesday
- Panels review broad science areas
- “Mirror” panels minimize conflicts
- Panels review
  - Regular GO proposals (1-99 orbits)
  - SNAPSHOT proposals (<200 targets)
  - Regular Archive & Theory proposals
  - Calibration proposals
- Panelists advise panel chair on Large/Treasury proposals
  - Past Large/Treasury programs are catalogued at http://archive.stsci.edu/hst/tall.html
- TAC meets Wednesday afternoon → ~noon Friday
- TAC reviews
  - Large GO (>99 orbits) & Large SNAP proposals
  - Treasury GO proposals
  - AR Legacy Proposals
# Types of Proposals

## Standard proposals

<table>
<thead>
<tr>
<th>GO</th>
<th>Regular (1-99 orbits); Large (≥ 100 orbits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP</td>
<td>Targets; no guarantees; &lt;45 mins; 2-year viability</td>
</tr>
</tbody>
</table>

## Special categories

<table>
<thead>
<tr>
<th>Long-term</th>
<th>TAC can allocate time in Cycles 20, 21 if justified scientifically</th>
</tr>
</thead>
<tbody>
<tr>
<td>ToO</td>
<td>ultra-fast (&lt;2 d) ToO: 1 activation allowed; 2-14 d ToOs: 8 activations allowed; &gt;14 d: no limit</td>
</tr>
<tr>
<td>CVZ</td>
<td>no penalty to observer if executed as non-CVZ</td>
</tr>
<tr>
<td>Calibrations</td>
<td>Calibrate specific modes of HST observation</td>
</tr>
<tr>
<td>HST-Chandra</td>
<td>Up to 400 ksec, 80 ksec time constrained</td>
</tr>
<tr>
<td>HST-Spitzer</td>
<td>Up to 60 hours</td>
</tr>
<tr>
<td>HST-NOAO</td>
<td>Up to 15-20 nights available on most telescopes</td>
</tr>
</tbody>
</table>
Policy Issues
Conflict of Interest

Our goal is informed, unbiased discussion of each proposal

• Voting committee members should have neither direct nor indirect interest vested in the outcome of the review
• The subset of the review committee discussing the proposal should have sufficient knowledge to assess the science

We identify two types of conflict:

Major conflicts

– Personal involvement (PI or Co-I)
– Recent former advisor/student of PI or Co-I
– Involvement in closely competing proposal (same targets or science)
– Close personal ties (family, etc.) with PI or Co-I

Minor conflicts

– Institutional conflict, i.e. same department/institution as PI or Co-I
– Close collaborator with PI/Co-I on the proposal
– Any other reason for discomfort
Close collaborators

Who qualifies as a close collaborator?

- Active collaborator on a current research program (including Cycle19 HST proposals)
- Active co-author on 3 or more papers in last 3 years
  - i.e. more than a participant in a large project (e.g. SDSS)
- Active collaborator on several recent programs
  - At least 3 projects completed in last 3 years

Key question: would my personal research benefit (or would there be an appearance of benefit) if this proposal is accepted?

If the answer is yes, then there is a conflict
Conflict of interest

Procedures

– Panelists sign Conflicts of Interest Disclosure form and return to PSS
– Chair (aided by PSS) is responsible for checking conflicts
– Note conflicts before discussing each proposal
– Minor conflicts (Institutional, Co-I collaborator):
  • Conflicted panelist(s) can choose to participate in the proposal discussion
– Major conflicts (all others):
  • Conflicted panelist(s) leaves the room for proposal discussion and vote

In all cases, conflicted panelists do not vote
If in doubt, ask SMO/SPG for clarification.
Duplication policy

- NASA policy protects GTO programs and current GO programs against duplication by later-cycle GO programs; duplicate targets will be disallowed or embargoed.
- Duplications are defined as *same target or field, same or similar instrument, similar mode, similar spectral range, similar exposure time*. Consult SPG staff if in doubt.
- The PI is responsible for noting duplications. Panels should approve duplications explicitly (in comments) or observations can be disallowed.
- Same-cycle duplications: avoid duplicate targets within and between panels. No “forced collaborations” allowed.
- Cross-panel duplications resolved by Chairs of “mirror” panels (@Breakfast meeting, 2\textsuperscript{nd}/3\textsuperscript{rd} days).

STScI instrument scientists will check accepted proposals for duplications.
General guidance for Cycle 19

• Panel members should assume that all instruments will be performing nominally in Cycle 19
  – Including NICMOS
• Panel members should not modify proposals unless there is a very strong scientific justification
• Panel members should \textit{not} reject proposals based on technical considerations
  – All proposals are reviewed by STScI after Phase I. If technical questions arise during the panel review, please summon a relevant expert.
• Panel members should \textit{not} take scheduling considerations into account in grading proposals.

\textbf{Concentrate on recommending the best science...}

...but recognize that it may not be possible to schedule some highly ranked programs
Panel procedures
Panel Distribution in Cycle 19

• Cycle 18 had 14 panels:
  - Seven Extragalactic (AGN/QSO, Cosmology, Unresolved stellar pops, Galaxies, IGM)
  - Five Galactic (Resolved stellar populations, Hot stars, ISM, Cool stars, Star formation)
  - Two Solar System/Planets panels

• Cycle 19: 14 panels (no change) with updated science categories:
  - PSF 1/2: local and distant solar systems, exoplanets, star formation
  - Stars 1/2/3: cool+hot stars, late stages, low-mass stars
  - StPops 1/2: resolved stellar populations, ISM
  - Galaxies 1/2/3: stellar content of galaxies, ISM in galaxies, dynamics, galaxy evolution
  - AGN 1/2: AGN, QSO, IGM, QSO absorption lines
  - COS 1/2: cosmology, lensing, GRB, galaxy clusters
Panel Review: Logistics

- Panel Chair runs meeting
  - Select a Co-Chair to run the meeting if Chair has to leave for conflict and to assist with review of comments on day 3

- PSS maintains database, produces ranked lists, answer questions or summon STScI staff experts, as needed.

- Technical and Policy support is available from STScI staff:
  - SPG (policy)
  - INS (instrument expertise)
  - OED (scheduling and implementation)

- Contact list by phone in each meeting room
Panel Review: overview

- Each panel has a specific allocation of N orbits
- Larger proposals receive an orbit-size dependent subsidy
- Snapshot & Archive/Theory allocations are drawn from a central pool
- Calibration proposals are drawn from a separate pool of orbits
- Panelists review and grade the proposals assigned to their panel, and produce a ranked list of programs that encompasses at least $2 \times N$ orbits
- All proposals receive (polite) comments
- Panelists comment on a subset of the TAC proposals
Proposals for triage

Lowest 35% of panel/TAC proposals are marked for triage based on preliminary grades from panelists

Why do we do this?

• Time constraints
  – 80 proposals@15 mins = 1200 mins = 20 hours
  – 56 proposals@15 mins = 840 mins = 14 hours

• Optimization & efficiency
  – Spend time discussing the best proposals
  – Oversubscription is ~8:1 for each panel
  – Avoid discussing proposals that are very unlikely to be approved

• Fairness
  – Triaged proposals can be resurrected, but…
  – Only 2 triaged proposals have ever been approved
Detailed Procedures

1. Panelists with major conflicts of interest leave the room. STScI staff leave if PI or Co-I.
2. Primary reviewer summarizes and reviews proposal. Secondary reviewer adds supplementary comments.
3. Discussion among panelists.
4. Specify resource allocation: primary orbits, coordinated or pure parallel, proprietary period, targets (SNAP) or budget size (AR).
5. Vote on proposal via Web-Reviewer System.
   *Those with minor conflicts may participate in discussion but do not vote.*
   *EVERYONE ELSE IN THE ROOM MUST VOTE – NO ABSTENTIONS*
6. Primary Reviewer is responsible for collating all relevant comments, and recording those comments via Web-Reviewer System.
Panelists are asked to comment on a subset of the TAC proposals

- Proposals are assigned to appropriate sets of mirror panels considering topic and proposal load
- This allows more scope for specialist commentary, informing the chairs and aiding discussion in the TAC meeting
- Consider overlap between TAC and panel programs and consider the ranking relative to the panel proposals
- Same rules apply for conflict of interest as with panel proposals
- Panelists are not required to vote on TAC proposals, but may choose to do so, at the panel chair’s discretion, as a guide to relative rankings

Cross-panel issues

- Mirror panels can get similar proposals due to in-panel conflicts
- After initial ranking, Chairs meet to identify, discuss and, if necessary, resolve overlapping proposals
- If additional expertise is necessary, Chairs can ask for input from (subsets) of other mirror panels
Possible panel schedule

- Panels have ~60-90 proposals to discuss
- Discuss triage *process* at the outset
  - Flag proposals that could be resurrected
- Discuss and grade non-triaged proposals (~14 hrs)
- Discuss and grade any resurrected triage proposals (~1 hr)
  - Some panels prefer to group proposals by subject and intersperse the resurrected proposals
- Finalize ranking and define “do not award” lower limit
  - Panels should consider the scientific balance
  - Panels re-rank proposals without changing the grades
- Discuss TAC proposals
- Write final report and review comments
- Total ~ 20 hours

~5 hours
Orbit Allocation for regular proposals with large orbit requests

- Goal: All proposals should have a similar chance of acceptance, independent of proposal size
- Panels are reluctant to recommend proposals in the ~30 – 99 orbit range.
- In C19 we will again provide a proposal-size dependent subsidy to each panel.
- We will provide 300 orbits of subsidy for all 14 panels combined.
- The subsidy will come out of the total allocation of 2100 orbits for the panels.
C19 Subsidy
Proposal Comments

• Comments are required for all proposals (including triaged proposals); these are entered via the Web-Reviewer tool.

• Primary reviewer is responsible for writing the comments; add any comments arising from the discussion to produce a final set of comments for each proposal.

• Don’t make up reasons for rejection – if a proposal was good, but just didn’t quite make the cut, then say so. Be particularly careful near the allocation boundaries, and remember that highly ranked proposals may not be schedulable.

• Use *Mandatory* comments only to exclude targets [e.g. duplications] or to reduce observing time allocation.

• All other comments are *advisory*. 
Grading the proposals: some suggestions
Grading process & panel responsibilities

• Keep all proposal types (GO, SNAP, AR) together and organize the discussion along science themes
• Maintain one panel score sheet with all proposals included. This ensures that the grading is done in a uniform way
• Produce a final ranked list that combines GO, SNAP, and AR proposals. Use the same grading scale for all three types:
  – Rank at least twice as many proposals as there are above cut-off line
  – Set a “do not award” lower limit
  – No need to rank carefully those proposals that clearly will not get accepted.
• Panel Chair [and Co-Chair] write a short summary, documenting the primary decisions of the panel, the reasoning that went into those decisions and the manner in which contentious issues were resolved .
  – The summary should capture the logic and rationale of the panels' conclusions in sufficient detail so that it can be recalled and understood later by the STScI Director and/or the TAC
Confidentiality

• Remember that you should not discuss the outcome of the panel evaluations, now or in the future.

• Many panel members (and STScI and JHU staff) are also proposers; don’t discuss results during breaks.

• If the panel wants to send a particularly important message to a proposer, use the comments.
Orbit allocations
Cycle 19 duration

Cycle 19 will end at 30 September 2012 → Nominal 12 month cycle

Typical past cycles have offered 3,300-3,500 orbits for GO programs

Cycle 19 (like Cycle 18) has less observing time available for Guest Observers responding to this Call for Proposals than earlier cycles. Present liens include:

- MCT Programs: ~750 orbits
- COS GTO programs: ~100 orbits
Cycle 19 Allocations

- 2,600 orbits for GO (Large+Regular)
  - 1,800 for direct allocation (panels)
  - 300 for subsidy of regular proposals requesting a large number of orbits
  - 500 for Large/Treasury programs (TAC)
  - TAC may choose to re-balance panel/Large split
- Orbit oversubscription is ~8/1 and 11/1 for Panels and TAC, respectively
- SNAP: ~ 1000 targets across panels
  - (~1/6 of targets proposed)
- AR: no budget required in Phase 1
**Orbit Allocation**

*Based on a combination of orbit and proposal pressure*

<table>
<thead>
<tr>
<th>Panel</th>
<th>GO props</th>
<th>GO orbits</th>
<th>Allocation</th>
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<tr>
<td>PSF1</td>
<td>55</td>
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<tr>
<td>TAC</td>
<td>48</td>
<td>5620</td>
<td>500</td>
</tr>
</tbody>
</table>
Questions????

• Please refer ALL policy questions to SPG staff!!!
After the TAC

• As usual, we welcome feedback on the TAC process
  – Can we improve it
  – What were the main shortcomings
  – Can we make it “faster”, “cheaper”, ”better”? 

• We will send email to all TAC and Panel members requesting your views of the process
THANK YOU!!!!
Personnel & Logistics
Key STScI Staff

• Director’s Office
  – Matt Mountain - Director
  – John Grunsfeld - Deputy Director

• Science Mission Office.
  – Iain Neill Reid - SMO Head
  – Claus Leitherer - Head of Science Policies Group
  – Rachel Somerville and Bob Williams - SPG Astronomers
  – Brett Blacker - SPG Technical Manager
  – Roz Baxter - SPG Administrative Staff
  – Loretta Willers – ESA Administrative Staff

• Hubble Mission Office
  – Ken Sembach - HST Mission Office Head
  – Helmut Jenkner - HST Deputy Mission Office Head
Observers

• Richard Griffiths - NASA HQ
• Ken Carpenter - NASA GSFC
• Pat Crouse – NASA GSFC
• Jennifer Wiseman - NASA GSFC
• Antonella Nota - ESA
Panel meeting rooms

- PSF 1  B139
- PSF 2  B235
- Stars 1  B337
- Stars 2  B447
- Stars 3  B462
- StPop 1  401A
- StPop 2  N420
- Gal 1  S322
- Gal 2  B511
- Gal 3  B611
- QSO 1  112
- QSO 2  N201A
- Cos 1  B475
- Cos 2  N310
- STScI Administrative Office  Muller lobby/Bloomberg 4th floor
- TAC/ Chairs’ morning meetings  Colonnade – Hubble Solarium
- TAC  Colonnade – Hubble Solarium