STScI | SPACE TELESCOPE SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

Joint HST/JWST programs and policies

a discussion starter for the STUC
April 2021

Science Timeline – JWST Cycle 2

Launch by 10/31/2021

1/7 HST Cy 30 Call

3/15 Chandra Cy 24 deadline

4/1 HST Cy 30 Deadline

6/13 HST Cy 30 TAC

6/20 Chandra Cy24 TAC

1/6 HST Cy 31 Call

3/15 Chandra Cy 25 deadline

4/7 HST Cy 31 Deadline

Commissioning (L+6 mo.)

2021 | 2022 | 2023

L+6 Start of Cycle 1 science observations

L+8 GTO Cy2 Call for proposals

L+11 GO Cy2 Call for proposals

L+13 GO Cy2 Deadline

L+15.5 GO Cy2 TAC

L+18 Cycle 2 starts

HST & Chandra dates are estimates

Science Timeline – JWST Cycle 2

Fall 2021 STUC Meeting

1/7 HST Cy 30 Call

4/1 HST Cy 30 Deadline

Spring 2022 STUC Meeting

6/13 HST Cy 30 TAC

Fall 2022 STUC Meeting

1/6 HST Cy 31 Call

4/7 HST Cy 31 Deadline

Commissioning (L+6 mo.)

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HST dates are estimates

Goals for today …

- We will have a longer discussion about possible joint Hubble/JWST policies and initiatives during the Fall 2021 STUC meeting --- STScI will have some ideas and possibilities to present, but we would like for the STUC to come prepared to the meeting with your own ideas and possibilities (no need to have these ready for the report from this meeting!)
- Some starter ideas….
  - Specific science areas where we should explicitly solicit joint JWST/HST proposals?
  - Do we need to do anything to stimulate discussion of joint proposals in the community?
  - Suggestions for how we can maximize/amplify the synergies between the two missions? Workshops? Webinars? Surveys?
  - Should there be a limit on the number of hours/orbits for joint proposals?
  - Should we make both the HST and JWST data non-proprietary for joint proposals?
- Brief overview of JWST Cycle 1 selected proposals
  - Full summary can be found at https://www.stsci.edu/jwst/science-planning/user-committees/jwst-users-committee

Executive summary of JWST Cycle 1 Results

Summary

- The JWST Cycle 1 GO/AR deadline was on November 24 2020
  - Proposers could request an extension to December 3
  - A total of 1173 complete submissions were received
- The 1173 complete proposals include
  - 1084 GO proposals for ~24,500 hours
  - 75 AR or Theory proposals
  - 374 proposal led by ESA PIs (31.9%)
  - 44 proposals led by Canadian PIs (3.8%)
  - 12766 Co-investigators in total
  - 4332 Unique investigators (PI, co-PI & co-I)
  - 1985 investigators have **not** been on a past HST proposal
- Representation from
  - 44 Countries
  - 45 US states + DC and the Virgin Islands
- We conducted a post-deadline survey for community feedback
  - Results will be presented at the JSTUC meeting in June

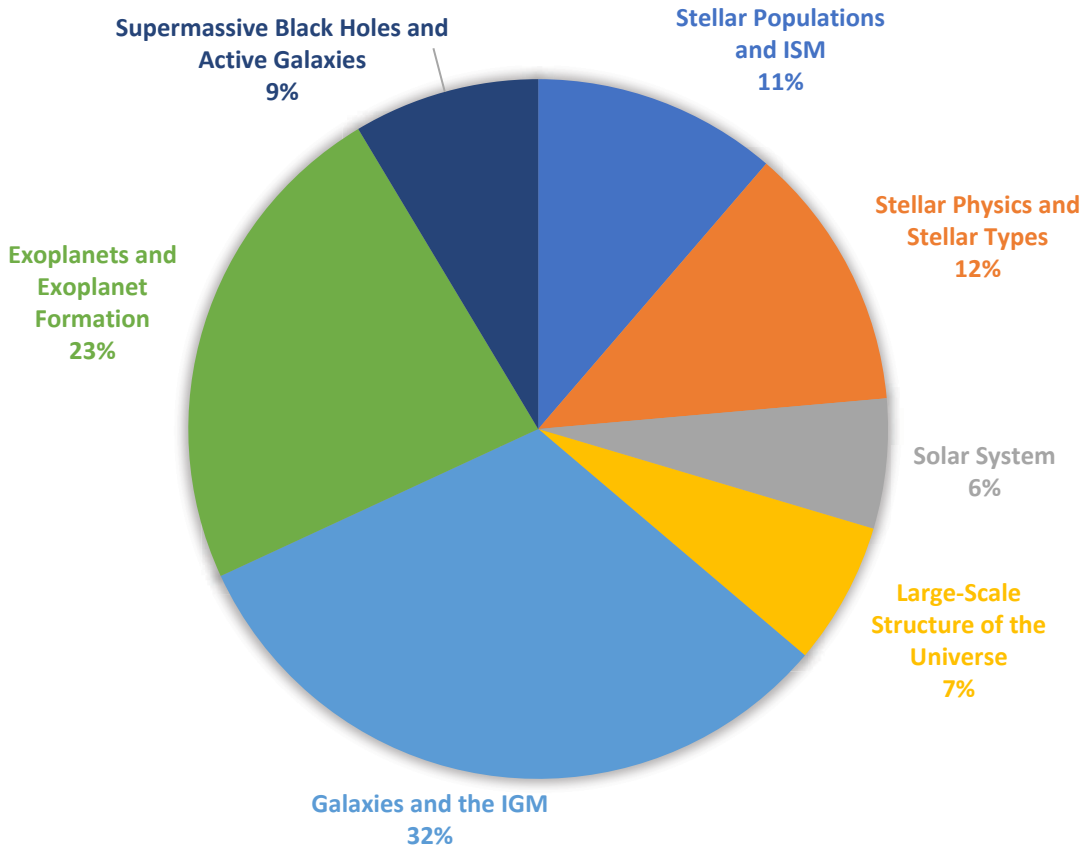
See this link for more information on proposal submissions: https://www.stsci.edu/files/live/sites/www/files/home/jwst/science-planning/user-committees/jwst-users-committee/_documents/jstuc-1220-cycle1-submission-stats-chen.pdf

Executive Summary

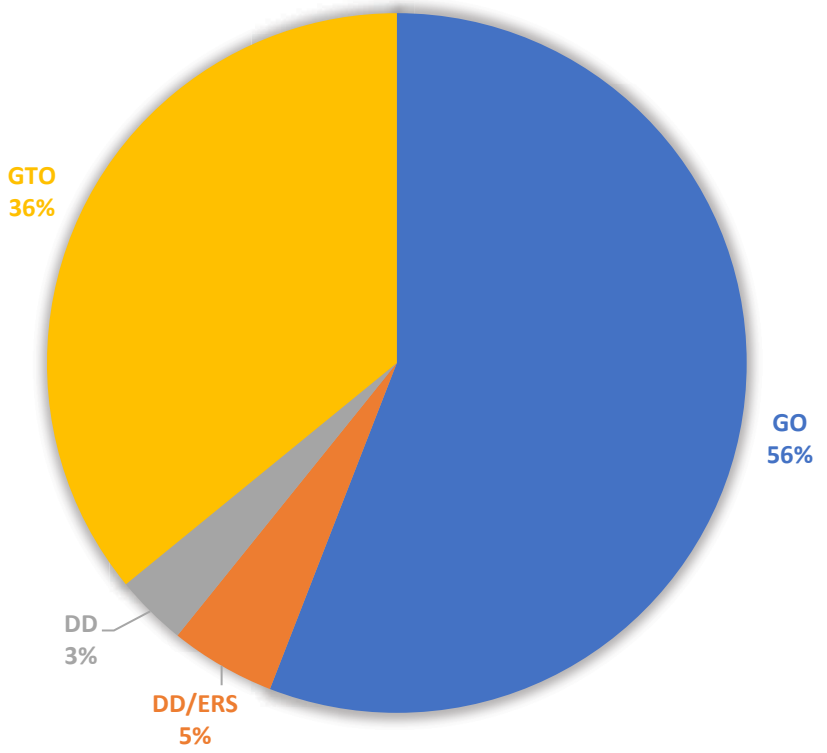
- Acceptance Rate
  - GO 1 in 4 for proposals and Hours
    - Small: 52% of time – 1 in 4.1
    - Medium: 32% of time – 1 in 3.8
    - Large: 16% of time - 1 in 4.75
  - Survey 0 recommended
  - Archival Research 20/75 = 1 in 3.75
    - Regular 15 recommended
    - Theory 5 recommended
    - Legacy 0 recommended
- Instruments: MIRI 28.1%, NIRCam 24.4%, NIRISS 6.7%, NIRSPEC 40.8%
  - Imaging 30% vs Spectroscopy 70%
- Student led PIs 8.7%

Science Category Distribution by Hours

FRACTION OF TIME PER SCIENCE CATEGORY



FRACTION OF TIME PER PROPOSAL TYPE



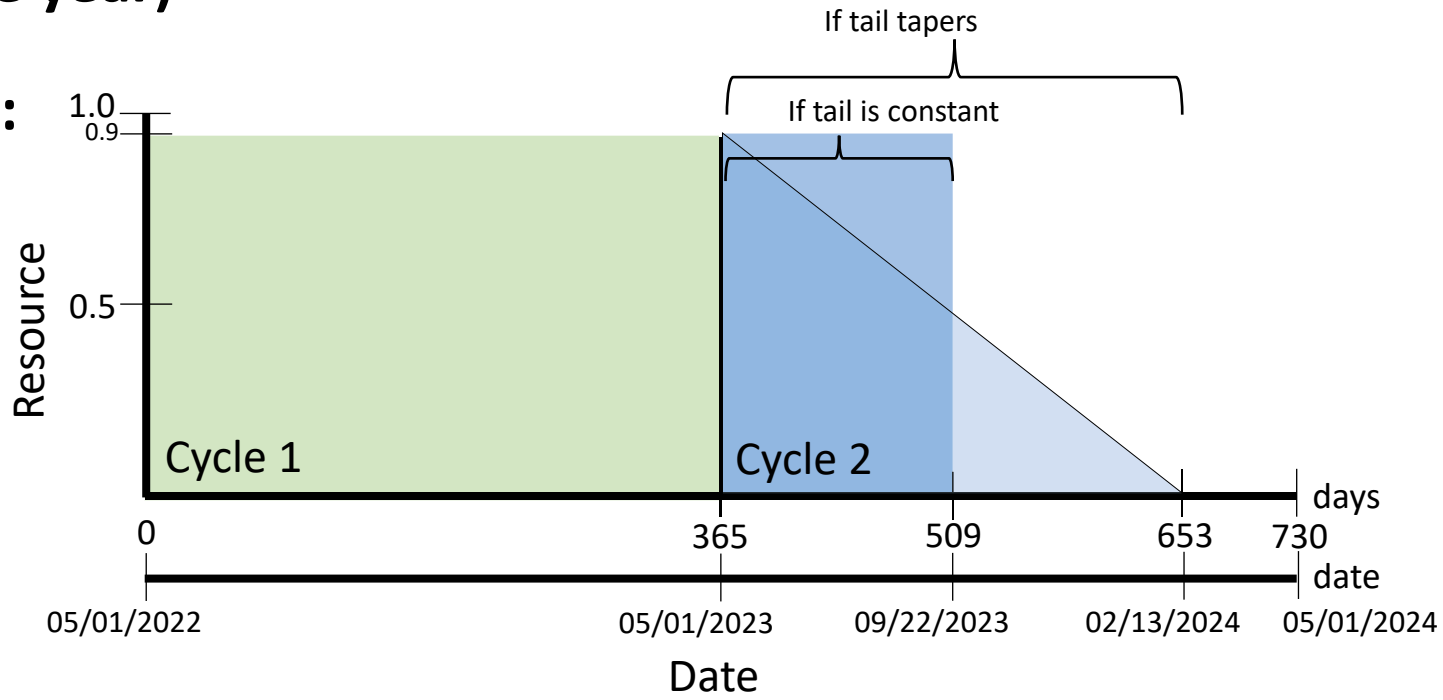
Executive Summary

- Proposal acceptance fraction 27% for panelists
- Proposal acceptance fraction 25% for STScI staff
- Joint HST: 1 Recommended
- Medium Proposals
  - 43 out of 163 recommended for 2029.6 Hours
    - 32 out of Medium Allocation and 11 from Small Allocation (Panels)
  - 45 were triaged
- Calibration Proposals
  - 4 recommended for 49.9 Hours
- ToO Activations
  - 4 less then 14 days and 12 > then 14 days
- Pure Parallels
  - 3 recommended for 779 Hours
- Cloud Computing
  - 0 recommended
- Data Science Software
  - 1 recommended

Subscription level

- **8,760 hours in an observing cycle (one year)**
- **Cycle 1: 10,500 - 11,000 hours to plan:**
  - 6000 hours GO
  - 500 ERS
  - 3800 GTO
  - 680 cal
  - 100 DD

  ==========
  - ~11,000 hours



- More than 25% of cycle material will appear in ***the cycle observing tail*** – ie, Cycle 2.
  - Observing tails help scheduling efficiency (more flexibility to fill gaps) – but result in some later plan windows.

Topics for future discussion

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