



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWST Cycle 1 GO/AR grants summary

JSTUC meeting: June 14 2021

STScI

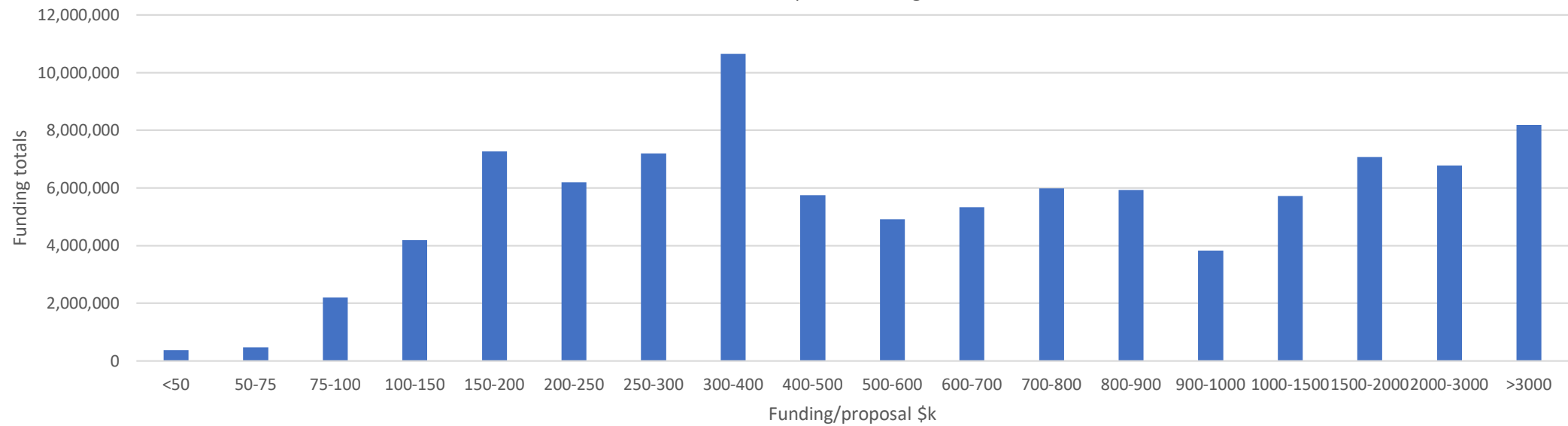
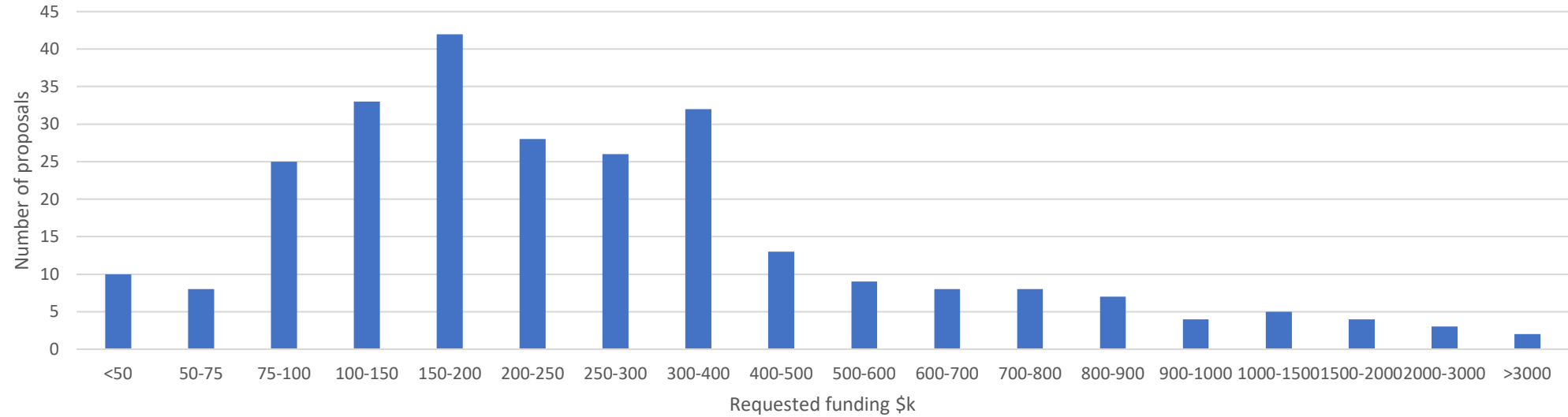


The challenge

- JWST Cycle 1 Program includes 266 GO programs and 20 AR programs
 - 180 US PIs, 89 ESA PIs, 10 CSA PIs, 7 foreign PIs
- This is ~50% more proposals than for recent HST cycles (180 in Cycle 28)
- Budget deadline was May 20th 2021
 - FRC nominally scheduled for July
 - PI notifications nominally scheduled for September/October
 - Grants required that the cycle value is in place for formal notifications
- Budget proposals submitted for 267 programs
 - 4 pending final submission
 - 175 US PIs, 77 ESA PIs, 8 CSA PIs, 8 foreign PIs
- Total request ~ \$98 million, approximately a factor of 3 higher than anticipated likely funding levels

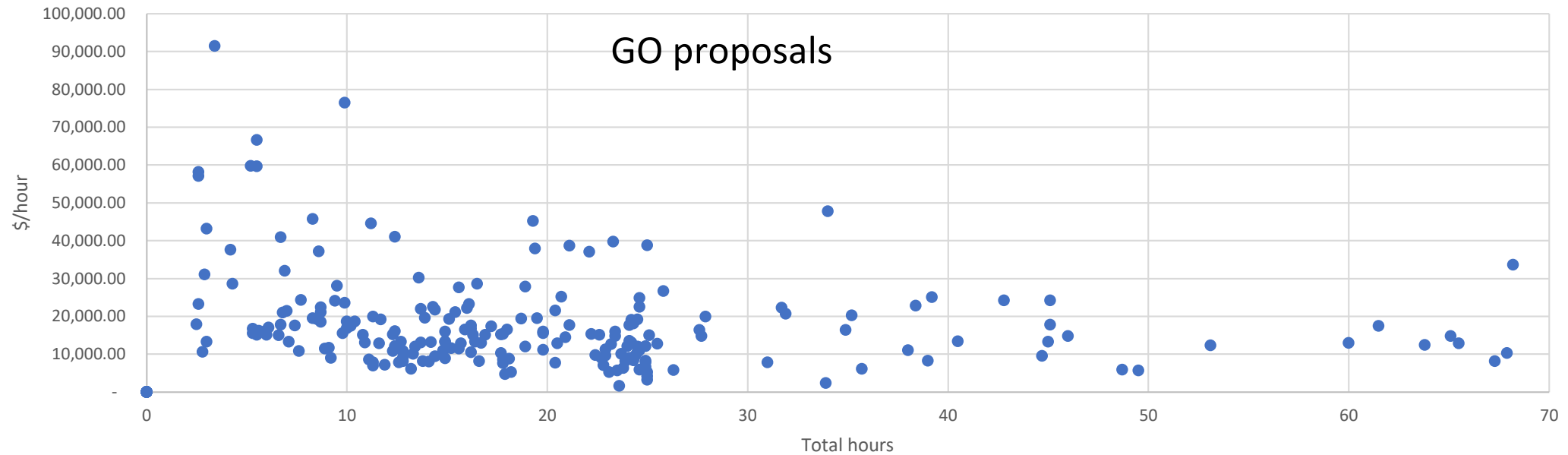


Funding requests – total funding





Funding requests - \$/hour



Morphologically consistent with HST programs:

- Distribution in \$/orbit for all programs (for HST)
- Broader distribution for smaller programs

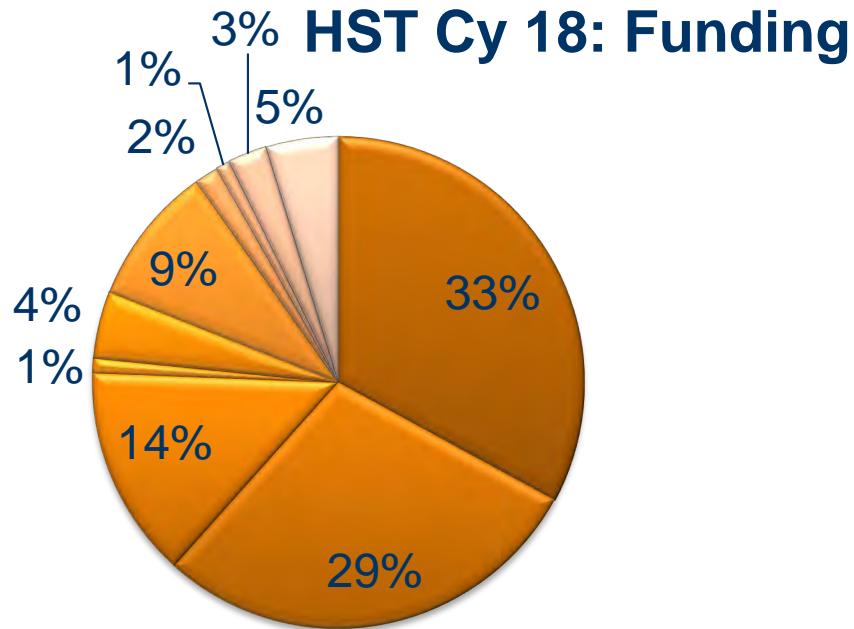
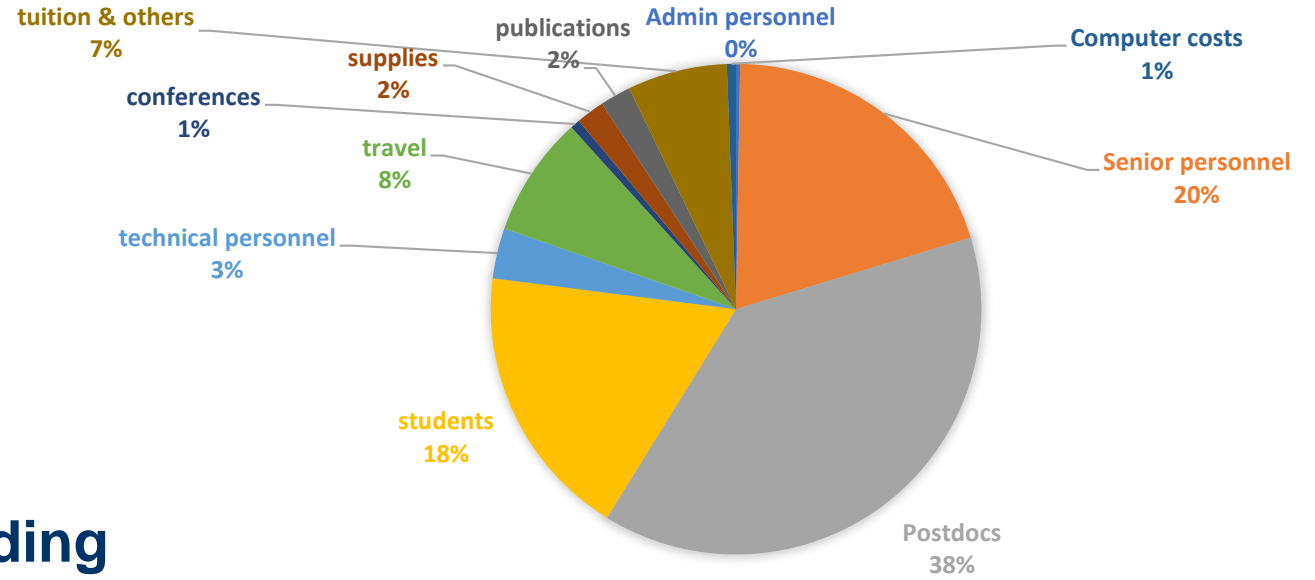


Funding distribution

Distribution of funding is broadly consistent with past HST proposals

- But amplified in scale

Substantial majority of funding for personnel (~80%)



- Senior personnel
- Post doc
- Grad student
- Undergrad
- Admin
- Travel
- Supplies
- Computing
- Publications
- Equipment & other



Baseline assumptions

- Goal is to support data reduction and analysis of JWST data by US researchers
 - Need to ensure that programs remain viable to address a subset of the science goals, if not the full range proposed
- All proposals will receive funding
 - We're **not** going to only fund a subset of “higher ranked” programs
- FRC system works well when demand \sim supply, but not when demand \gg supply
 - Need to develop a more formulaic approach



Principles

- Efficiency: limit additional work for the community – don't restart the process
 - Use the submitted budget as a starting point for calculations
 - Provide a not-to-exceed \$-value to Program PIs for revised budget submission
- Reasonableness: balance funding requests
 - Cap requests for travel and publications
 - Take personnel, material requests at face value
- Equity: mitigate the impact on more modest programs
 - Set a baseline funding level
 - Every proposal gets this funding without adjustment
 - Scale funding above the baseline level
 - Use a progressive scale that applies larger cuts to more expensive programs
 - Apply a weighting to pure parallel programs since those observations are contingent on available opportunities



Next steps

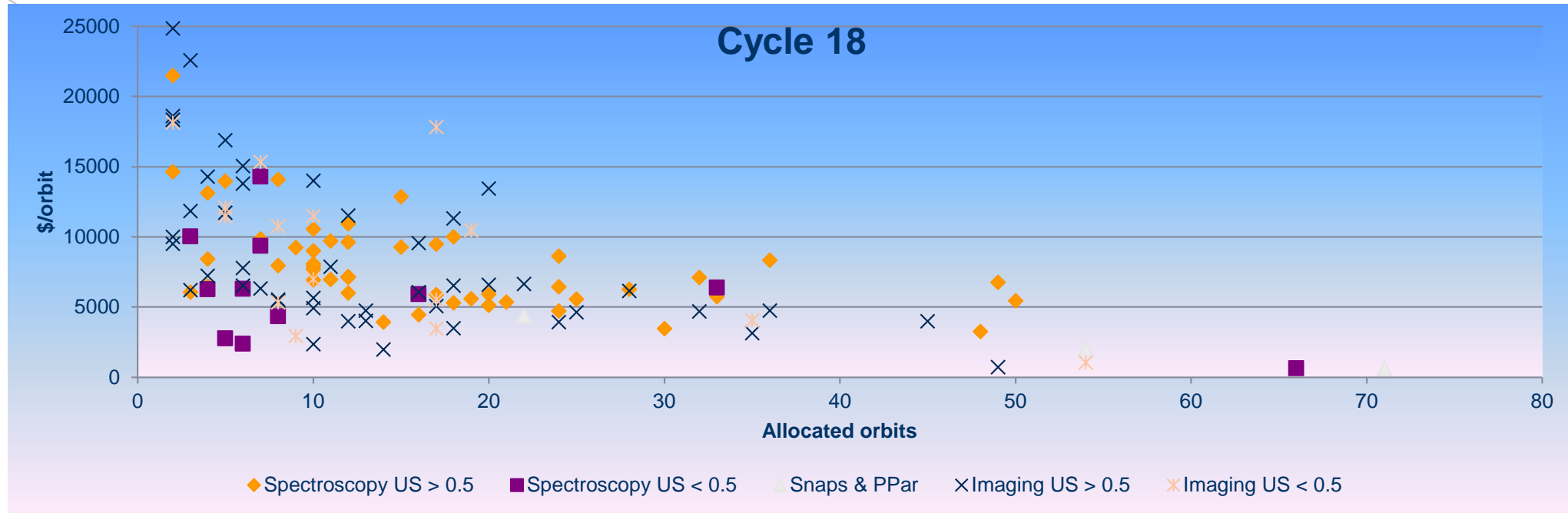
- STScI informed all Cycle 1 PIs (& Admin PIs) of the current circumstances
- STScI will work with the JSTUC to assess the current proposals
 - Develop a funding model for Cycle 1
 - Provide recommendations for future cycles



Backup



HST comparison - Cycle 18 GO & SNAP



- ◆ Largest dispersion in funding levels is for the smallest programs
- ◆ Average \$/orbit decreases for larger programs
- ◆ SNAPs funded at a lower level than GO
- ◆ US-minority spectroscopy programs tend to be funded at a lower level for small programs