Cycle 24 Summary and Changes for Cycle 25

Cycle 24 Summary Results

Category	**Requested**	**Approved**	**Percentage Approved**	**ESA Approved**	**ESA Approved Percentage**
GO Proposals	891	196	22.0%	50	25.5%
Snapshots	36	7	19.4%	1	14.3%
Archival	90	18	20.0%	0	0.0%
AR Legacy	13	3	23.1%	1	100.0%
Theory	64	21	32.8%	0	0.0%
Total	1094	245	22.4%	52	25.6%
Primary Orbits	**25,611**	**3,760**	**14.7%**	**1345**	**35.8%**

Programs Recommended by the TAC

ID	First Name	Last Name	Institution	Resources	Title
0930	Bjoern	Benneke	California Institute of Technology	78	A Search for Methane, Ammonia, and Water on Two Habitable Zone Super-Earths
0123	Rich	Bielby	Durham Univ.	96	QSAGE: QSO Sightline And Galaxy Evolution
0315	Gabriel	Brammer	Space Telescope Science Institute - ESA	AR Legacy	Grizli: The Grism redshift & Line Database for HST WFC3/IR Spectroscopy
1096	Marios	Chatzikos	University of Kentucky	AR Legacy	Cloudy as a Shock Modeling Code: Utility for HST, & Looking out to JWST
0079	Charlie	Conroy	Harvard University	AR Legacy	Measuring the Star Formation History of the Local Universe
0116	Julianne	Dalcanton	University of Washington	108	A Legacy Imaging Survey of M33
0663	Denis	Grodent	Universite de Liege	151	HST-Juno synergistic approach of Jupiter's magnetosphere and ultraviolet auroras
0939	Nitya	Kallivayalil	The University of Virginia	160	Milky Way Cosmology: Laying the Foundation for Full 6-D Dynamical Mapping of the Nearby Universe
0243	Julia	Roman-Duval	Space Telescope Science Institute - ESA	101	Metal Evolution and TrAnsport in the Large Magellanic Cloud (METAL): Probing Dust Evolution in Star Forming Galaxies
0300	Evgenya	Shkolnik	Arizona State University	118	HAZMAT: Habitable Zones and M dwarf Activity across Time
0529	David	Sing	University of Exeter	498	The Panchromatic Comparative Exoplanetary Treasury Program
0583	Nao	Suzuki	Institute for Physics and Mathematics of the Universe	46 + 50	SUbaru Supernovae with Hubble Infrared (SUSHI)

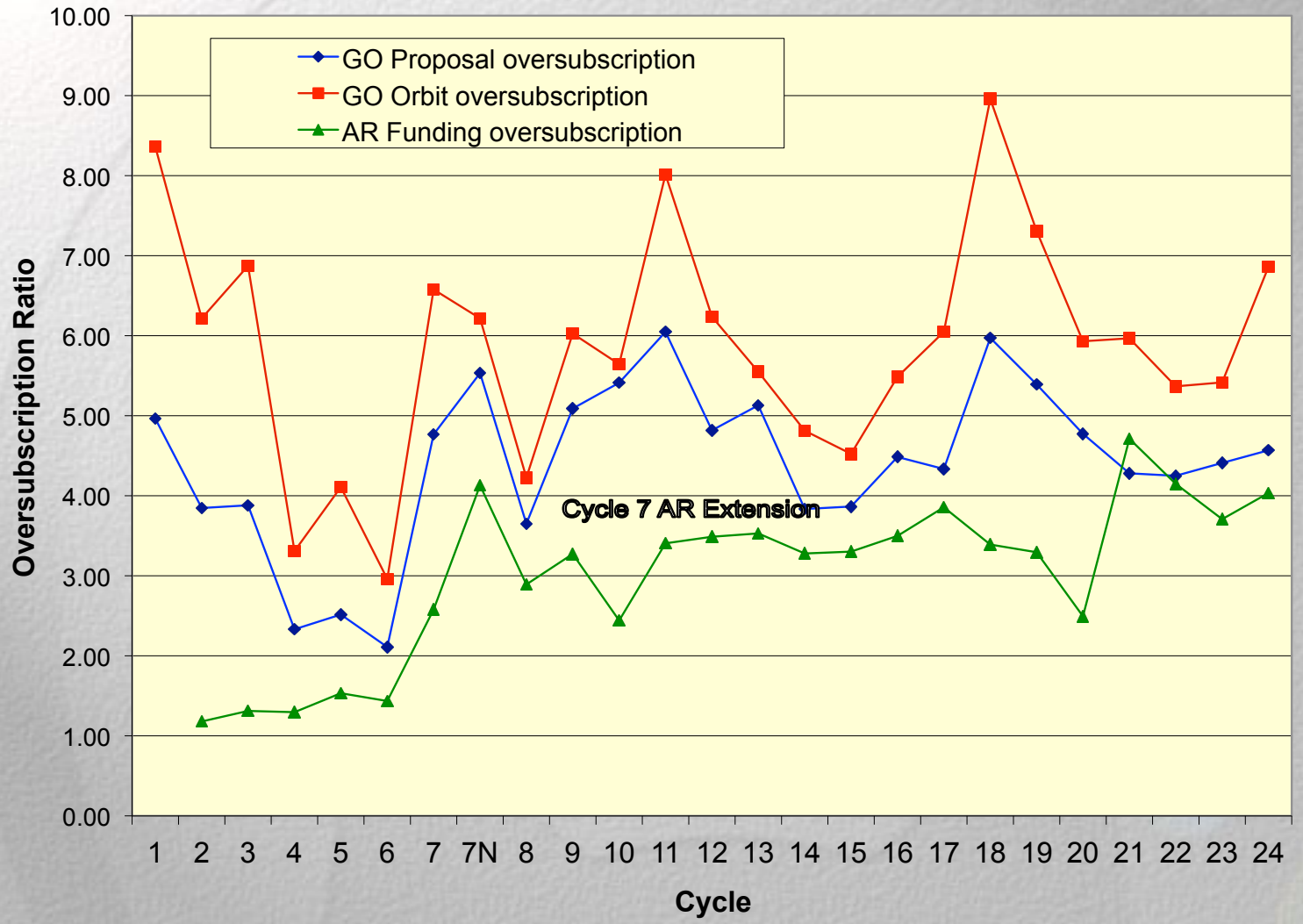
Medium Programs Recommended by the Panels

ID	First Name	Last Name	Institution	Resources	Title
0759	Alessandra	Aloisi	Space Telescope Science Institute	40	Tracing Galactic Outflows to the Source: Spatially Resolved Feedback in M83 with COS
1060	Nahum	Arav	Virginia Polytechnic Institute and State University	40	Deciphering Quasar Outflows and Measuring their Contribution to AGN Feedback
0782	Thomas	Beatty	The Pennsylvania State University	40	Phase-Resolved Emission Spectroscopy of the Transiting Brown Dwarf KELT-1b Using WFC3
0694	Charlie	Conroy	Harvard University	68	A Year in the Whirlpool
0281	Ian	Crossfield	University of Arizona	44	Atmospheric Albedos, Alkalis, and Aerosols of Hot Jupiters
0215	Jay	Farihi	University College London	66	An Ultraviolet Spectral Legacy of Polluted White Dwarfs
0211	Dimitrios	Gouliermis	Zentrum fuer Astronomie der Universitaet Heidelberg	54	MYSST: Mapping Young Stars in Space and Time - The HII Complex N44 in the LMC
0334	Ruth	Peterson	SETI Insitute	44	Tracing the Earliest Nucleosynthesis from Elements Just Past the Iron Peak in Extremely Metal-Poor Dwarfs
0152	Brant	Robertson	University of California - Santa Cruz	64	Lyman Continuum Escape Survey (LACES): Detecting Ionizing Radiation from z~3 LAEs with Powerful Optical Lines
0544	Ian	Roederer	University of Michigan	40	The Unexplored Domains of the s-Process
0691	Elena	Sabbi	Space Telescope Science Institute	20 + 13 + 12	The primordial binary fraction in the young massive cluster Westerlund 2
1045	Michael	Shara	American Museum of Natural History	53	Ultraviolet Flashers in M87: Rapidly Recurring Novae as SNIa Progenitors
0139	Bart	Wakker	University of Wisconsin - Madison	68	Observing gas in Cosmic Web filaments to constrain simulations of cosmic structure formation
0958	Michael	Wong	University of California - Berkeley	45 + 4	Wide Field Coverage for Juno (WFCJ): Jupiter's 2D Wind Field and Cloud Structure

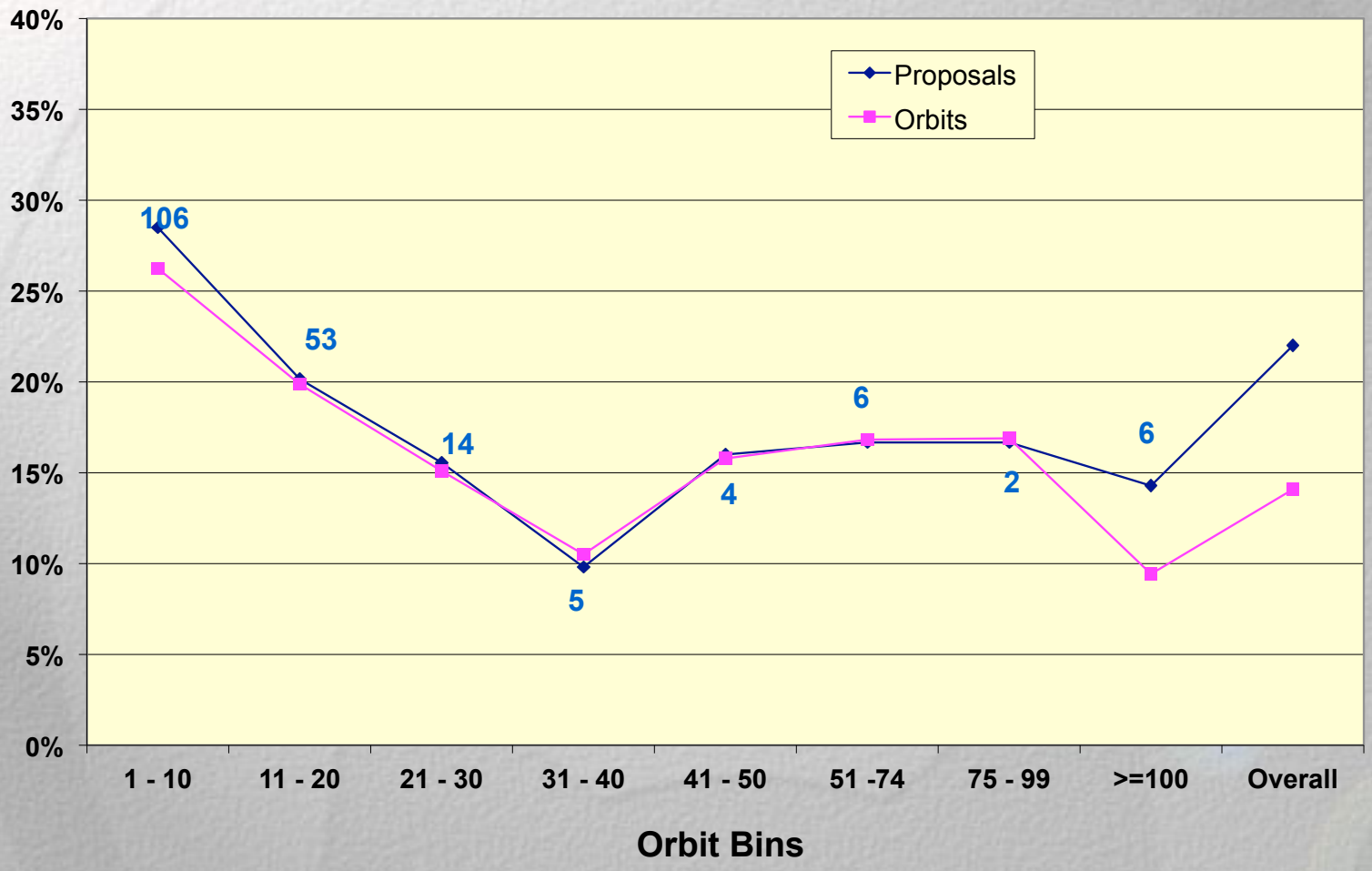
Mission Support Proposals

ID	First Name	Last Name	Panel	Orbits	Title	Decision	Mission
652	Luke	Moore	SoSys	13	Variability of Jupiter's main auroral emission and satellite footprints	Recommend	JUNO
663	Denis	Grodent	TAC	151	HST-Juno synergistic approach of Jupiter's magnetosphere and ultraviolet auroras	Recommend	JUNO
678	Marc	Buie	SoSys	6+5+1	Astrometry of 2014MU69 for New Horizons encounter	Recommend	New Horizons
718	Susan	Benecchi	SoSys	24	The Lightcurve of New Horizons Encounter TNO 2014 MU69	Recommend	New Horizons
814	John	Clarke	SoSys	10	Variability in the Escape of Water from Mars	Recommend	Maven/EXO Mars
958	Michael	Wong	SoSys	45+4	Wide Field Coverage for Juno (WFCJ): Jupiter's 2D Wind Field and Cloud Structure	Recommend	JUNO
976	John	Spencer	SoSys	8	Understanding Callisto's Atmosphere	Recommend	JUICE
1024	Frank	Crary	SoSys	1	Observing an artificial meteor: Cassini's entry into the atmosphere of Saturn	Recommend	Cassini

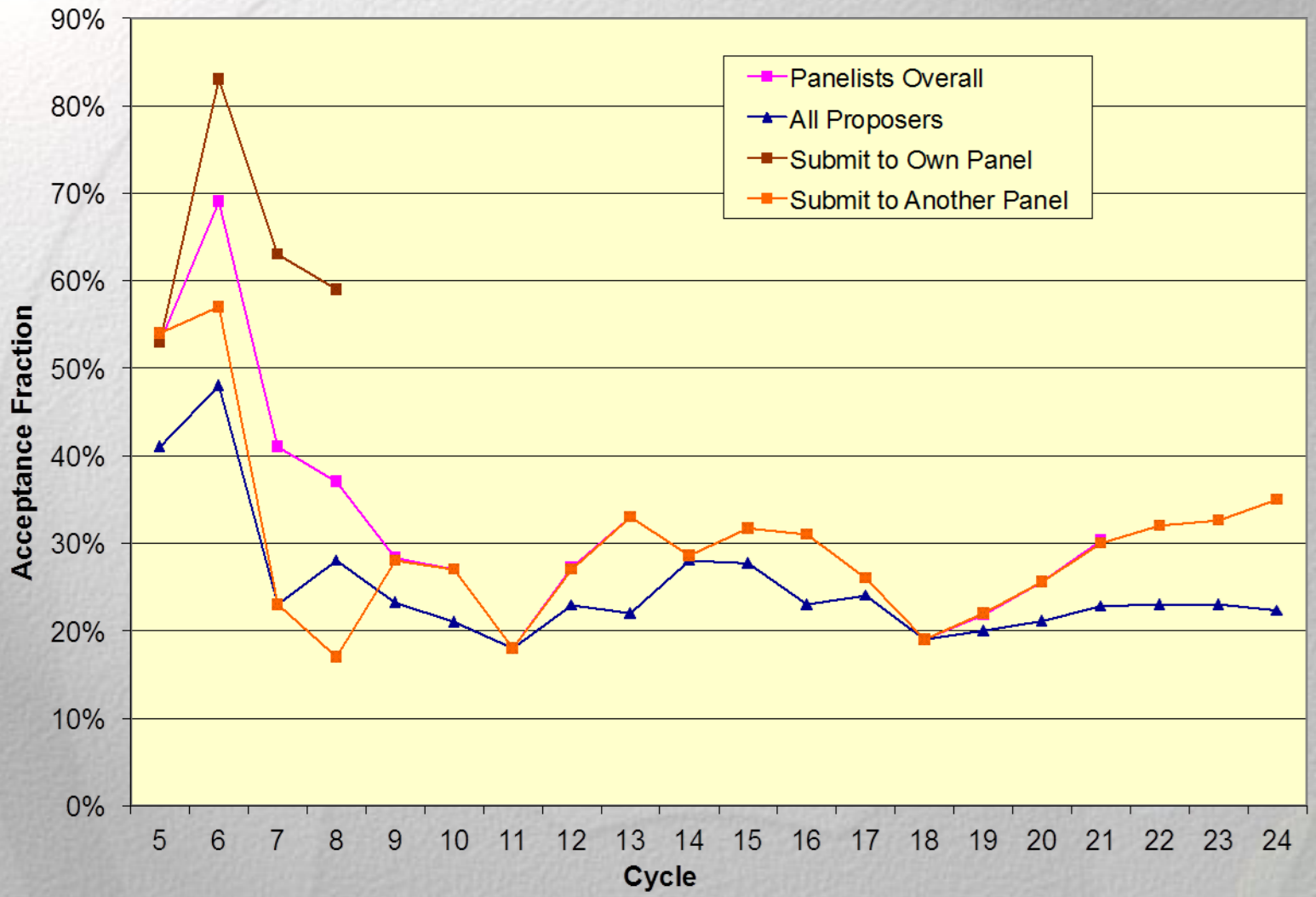
Over-subscription by Cycle



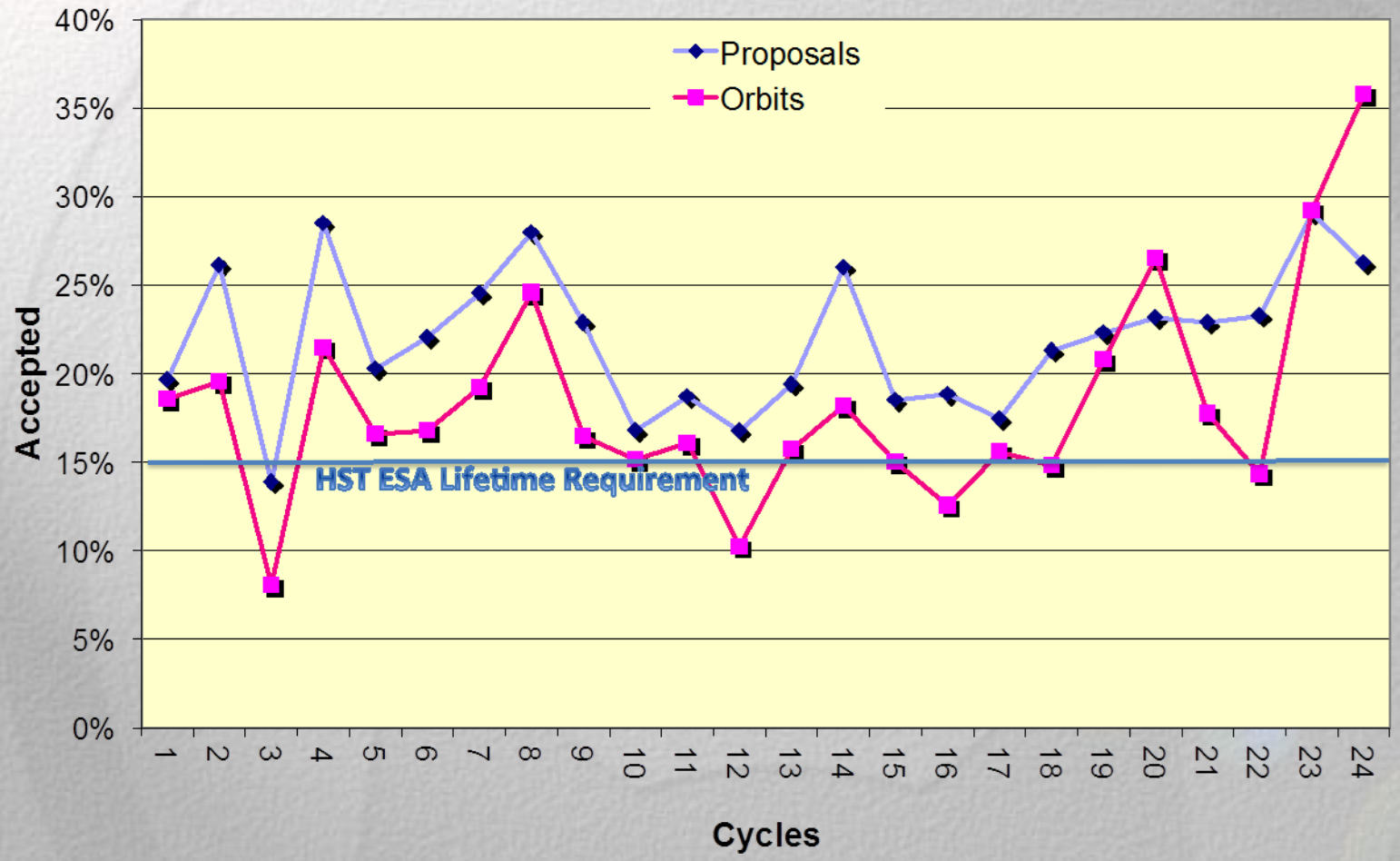
Acceptance Fraction by Size



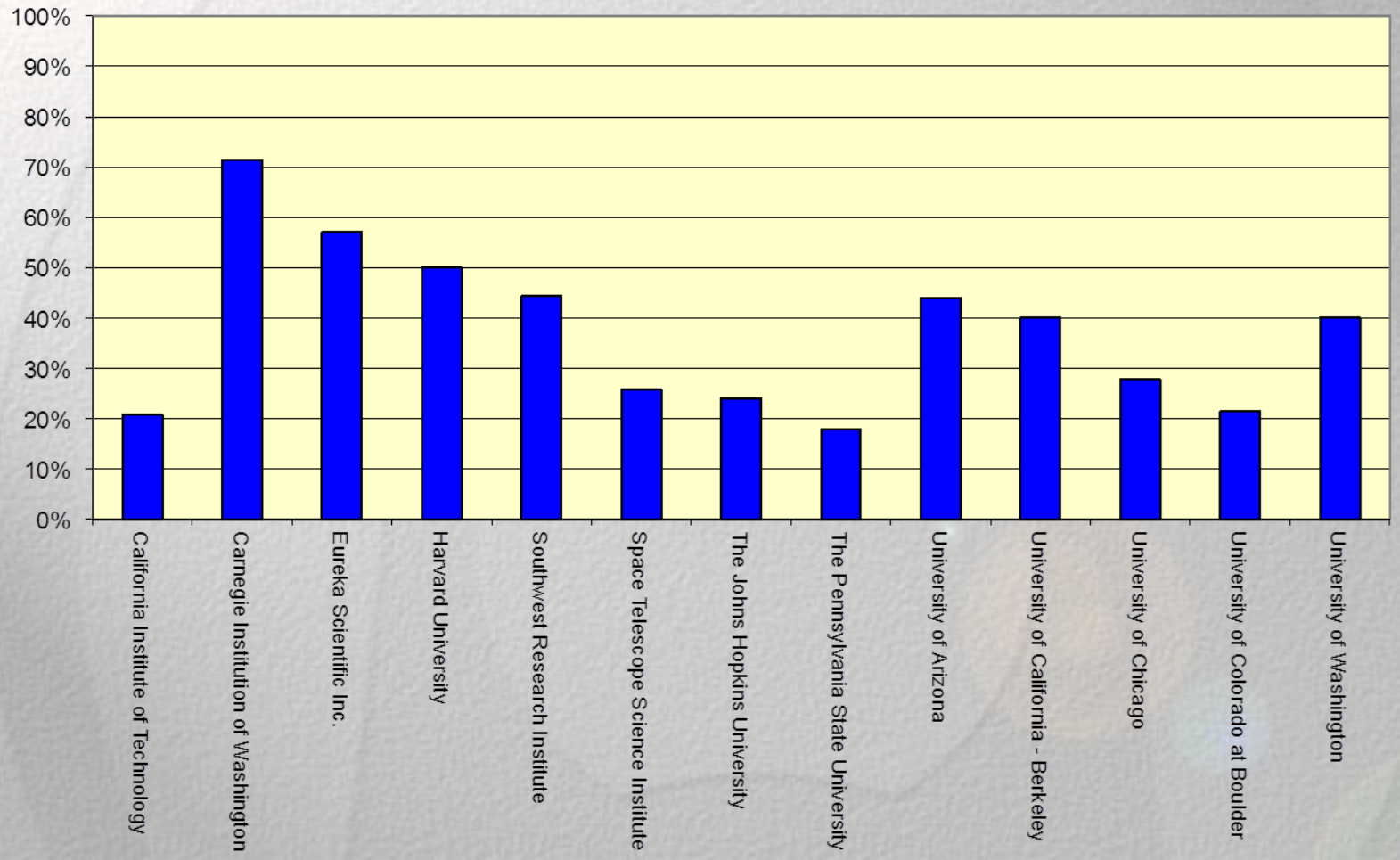
Panelist Acceptance Fraction



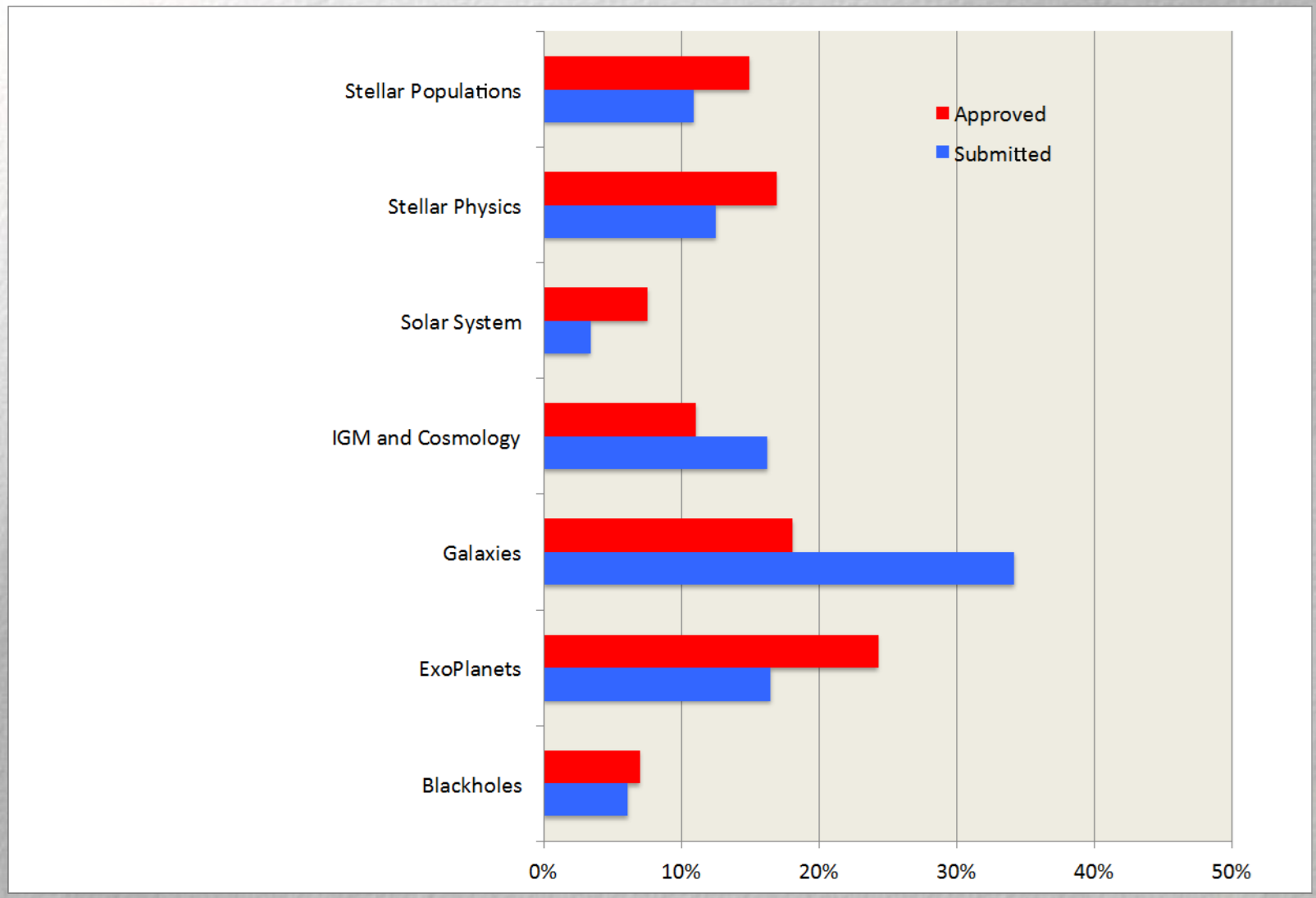
ESA Acceptance Fraction



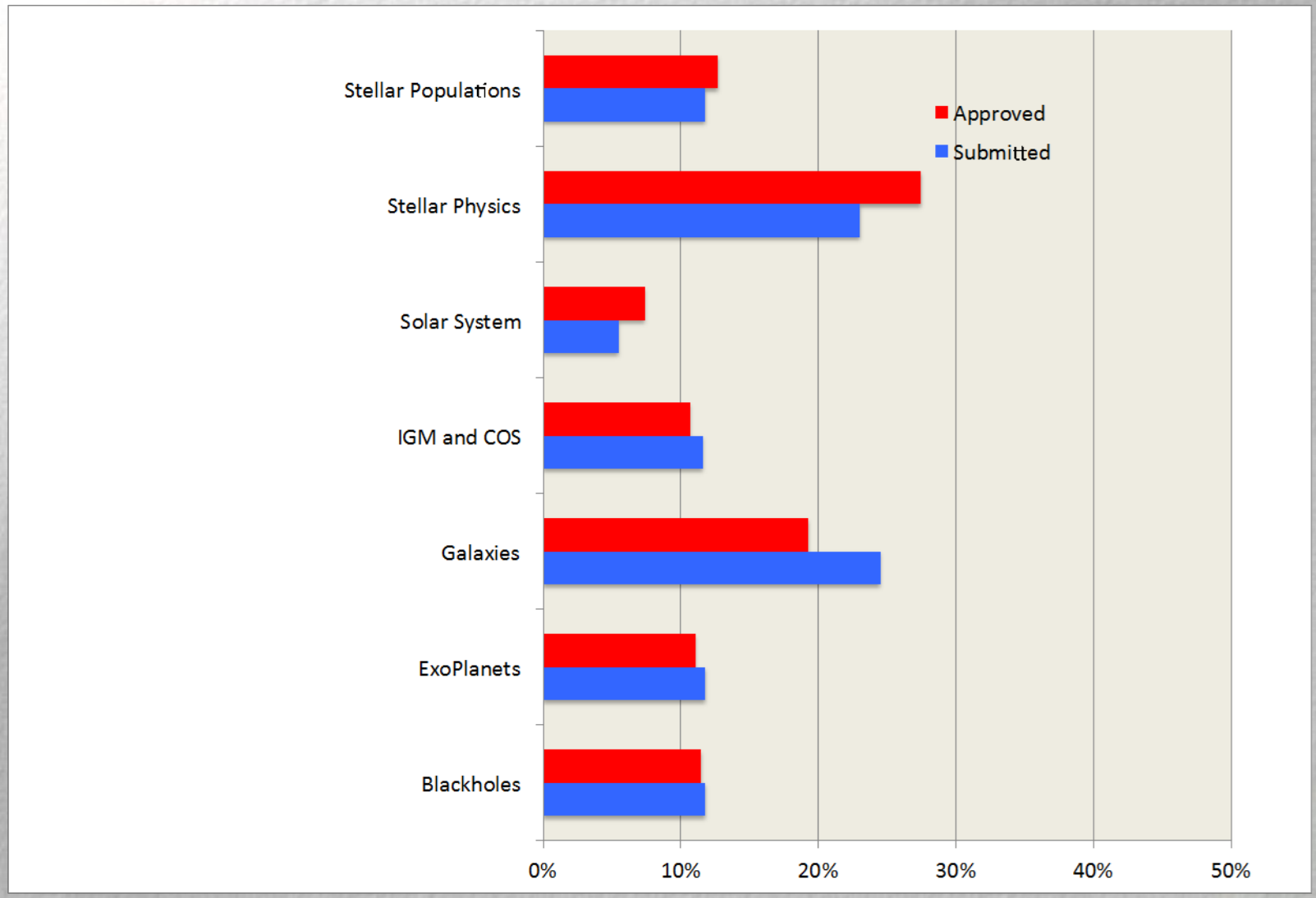
Proposal Institutional Acceptance Fraction



Science Category Distribution for Orbits



Science Category Distribution for Proposals



Instruments

Configuration	Mode	Prime %	Coordinated Parallel %	Total	Instrument Prime Usage	Instrument Prime + Coordinated Parallel Usage	Pure Parallel Usage	Snap Usage
ACS/SBC	Imaging	1.2%	0.0%	1.0%			0.0%	0.0%
ACS/SBC	Spectroscopy	0.1%	0.0%	0.1%			0.0%	0.0%
ACS/WFC	Imaging	12.5%	42.5%	16.1%			0.0%	16.0%
ACS/WFC	Ramp Filter	0.2%	0.0%	0.2%	13.9%	17.4%	0.0%	0.0%
ACS/WFC	Spectroscopy	0.0%	0.0%	0.0%			0.0%	0.0%
COS/FUV	Spectroscopy	18.6%	0.0%	16.3%			0.0%	6.0%
COS/NUV	Imaging	0.0%	0.0%	0.0%	20.5%	18.0%	0.0%	0.0%
COS/NUV	Spectroscopy	1.9%	0.0%	1.7%			0.0%	0.0%
FGS	POS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FGS	TRANS	0.0%	0.0%	0.0%			0.0%	0.0%
STIS/CCD	Imaging	0.8%	0.0%	0.7%			0.0%	0.0%
STIS/CCD	Spectroscopy	8.9%	0.0%	7.8%			0.0%	6.0%
STIS/FUV	Imaging	3.3%	0.0%	2.9%	27.6%	24.3%	0.0%	0.0%
STIS/FUV	Spectroscopy	7.4%	0.0%	6.5%			0.0%	0.0%
STIS/NUV	Imaging	0.0%	0.0%	0.0%			0.0%	0.0%
STIS/NUV	Spectroscopy	7.3%	0.0%	6.4%			0.0%	0.0%
WFC3/IR	Imaging	11.0%	13.5%	11.3%			40.0%	43.0%
WFC3/IR	Spectroscopy	8.3%	0.0%	7.3%	37.9%	40.3%	23.0%	0.0%
WFC3/UVIS	Imaging	18.4%	44.0%	21.5%			37.0%	29.0%
WFC3/UVIS	Spectroscopy	0.1%	0.0%	0.1%			0.0%	0.0%
		100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Special categories

- UV Initiative
  - Target was 40% for panels and 50% for TAC
  - Actuals were 36% for panels and 54% for TAC
  - 2041 approved from 3760 requested
  - 9 of 42 ARs; 78 of 196 GO programs
- JWST Initiative Proposals
  - Proposals for observations required for future JWST programs
  - 13 approved out of 60 submitted
- Juno-related programs
  - One large, one medium & 2 regular programs associated with NASA's Juno mission

Targets of Opportunity

ID	First	Last Name	Orbits	Disruptive Activations	Non-Disruptive Activations	Total Activations	Multi-Cycle	Type of ToO
0234	David	Jewitt	8	1		1	Yes	Comet
0318	Ori	Fox	15		1	1	Yes	Type IA Supernovae
0347	Karen	Leighly	4		1	1	Yes	BAL Galaxy
0473	Andrew	Levan	4	1		1		Gravitational Wave Sources
0475	C.	Kochanek	22	1		1		Tidal Disruption Event
0521	Schuyler	Van Dyk	4		4	4		Supernovae
0548	Nial	Tanvir	12	1		1		Short Duration GRB
0583	Nao	Suzuki	46		32+27	59	Yes	Type IA Supernovae
0717	Eleonora	Troja	12	1		1	Yes	Short Duration GRB
0963	Robert	Quimby	14	2	2	4		Superluminous Supernovae
1059	Armin	Rest	12		1	1	Yes	CAS A
1075	Peter	Brown	14	1		1		Type IA Supernovae
1092	Andrew	Levan	2	1		1		Active Magnetar
			169	9	41	77		

Cycle 24 - Lessons Learned

- Internet – worked well for everyone this time since we set up special nodes
- Very Large Programs: if this category will be offered in the future, a specific orbit pool will be provided
- The panel instructions will include a flow chart to describe tasks for panelists and chairs
- Provide better guidance on judging the contribution to future missions, especially JWST
- Primary and secondary reviewers will be assigned after the triage to balance the load during the discussions

Mid-Cycle 24-1 response

- 52 proposals submitted by midnight, September 30
  - Broad range of science topics
  - Total of 275 orbits requested
- Proposals reviewed for compliance
  - One resubmission, one calibrations
  - Two proposals failed to explain why they could not have been submitted to Cycle 24
  - 4 proposals sent out for review

Extrasolar planets	Galaxies	IGM	AGN/ blackholes	Solar System	Stellar Physics	Stellar Pops
7	12	2	11	4	11	2

Mid-Cycle 24-1 process

- Reviewers drawn primarily from successful proposers to Cycle 23 & 24
  - 395 potential reviewers contacted, 151 accepted, using 65
  - Four reviewers per proposal
  - No more than 4 proposals per reviewer
- Standard format for review

Please answer the following questions. Grades should be assigned on a scale of 1 to 5 (integer values only), where

- 1 = Excellent 2 = Very Good 3 = Good 4 = Fair 5 = Poor

- What is your assessment of the scientific merit of the proposed and its potential contribution to the advancement of scientific knowledge
  - Grade:
- What is your assessment of the program's overall importance to astronomy?
  - Grade:
- What is you assessment of the scientific urgency of the observations?
  - Grade:
- Can the program science goals be achieved only through observations with Hubble Space Telescope?
  - Yes/No
  - If No, please specify the alternative source of observations.

- Please provide brief feedback on the main factors of the proposal that support the grades selected above:

- Review deadline, October 31

Cycle 25 Features

- Cycle 25 will start on **10/1/17** and end on **9/30/18**
- The Cycle 25 HST TAC will pre-allocate orbits for the first 6 months of Cycle 26 in order to alleviate logistic conflicts with the JWST TAC
- All five instruments will be offered (if operational): ACS, COS, FGS, STIS, WFC3
- The proposal review will be held on the JHU campus
- The same proposal categories as in C24 will be offered
- The default proprietary period will be 6 months for regular and medium proposals

Cycle 25 Features (cont.)

- Chairs for all 15 panels are being selected
- Panel Chairs and three At-Large members will form the TAC chaired by **Catherine Cesarsky** (CEA, Saclay)
- Each panel will have 9 Panelists and the Chair
- Candidate Panelists will be contacted in November
- Paying particular attention to **diversity** and balance between **senior** and **junior** astronomers

Available Orbits in Cycle 25 - I

- Roughly **3450** orbits available for Cycle 25 GO's
- Orbit number accounts
- Break-down:
  - **1000** orbits for the TAC (**Large** and **Treasury**)
  - **1800** orbits for the 15 Panels (**Small** GO with <35 orbits)
  - **650** orbits will be allocated for **Medium** proposals (35 – 74 orbits)
  - Distribution may be adjusted based on proposal pressure

Available Orbits in Cycle 25 - II

- Additional orbits will be made available for the Cycle 26 pre-allocation
- Roughly 1000 Cycle 26 orbits will be allocated to Small and Medium proposals
- These orbits will be proportionally added to the Cycle 25 allocation for each panel
- The programs will be scheduled in Cycle 25 or the first half of Cycle 26 by optimizing the HST long-range plan.

Cycle 25 Panels

- *Solar System Panel* (major and minor planets and other bodies)
- *Planets and Planet Formation Panels* (Extra-solar Planets, Debris Disks)
- *Stellar Physics Panels* (Cool Stars, Hot Stars, Resolved Star Formation, ISM and Circumstellar Matter)
- *Stellar Populations Panels* (Resolved Stellar Populations)
- *Galaxies Panels* (Unresolved Stellar Populations and Galaxy Structure, ISM in External Galaxies, Unresolved Star Formation, IGM, QSO absorption lines)
- *Massive Black Holes and their Hosts Panels* (AGN/Quasars)
- *Large-Scale Structure of the Universe Panels* (Cosmology, Galaxy Clusters, Lensing)

Cycle 25 Panel Changes

- *Solar System Panel*:
  - Solar system will be one separate panel which will physically meet together with all other panels
  - In C24 the panel met remotely; this made it difficult to recruit panelists and led to less productive discussions at the meeting
- *Galaxies Panel*:
  - IGM science will be paired with Galaxies science
  - All IGM proposals will be discussed in two of the three panels
- *Large-Scale Structure of the Universe Panel*:
  - Based on community feedback IGM science will not be paired with Cosmology
  - Pay attention to panel size since these panels tends to be small

Cycle 25 Proposal Review Schedule

- *01/11/17*: Call for Proposals release
- *04/07/17*: Phase I Proposal deadline
- *04/28/17*: Proposals made available to panels
- *05/31/17*: Preliminary grades due
- *06/11/17 – 06/16/17*: Panels and TAC meet
- *06/30/17*: Notifications sent out
- *07/28/17*: Phase 2 and budget deadlines