

Cycle 27 TAC and Mid-Cycle Results

Cycle 28 Preparations

Cycle 27 TAC Summary Results

Category	Requested	Approved	Percentage Approved	ESA Approved	ESA Approved Percentage
GO Proposals	838	149	17.8%	38	25.5%
Snapshots	32	7	21.9%	0	0.0%
Archival	69	16	23.2%	0	0.0%
AR Legacy	23	3	13.0%	0	0.0%
Theory	57	6	10.5%	0	0.0%
Total	1019	181	17.8%	38	24.4%
Primary Orbits	24,454	2,686	11.0%	465	17.3%

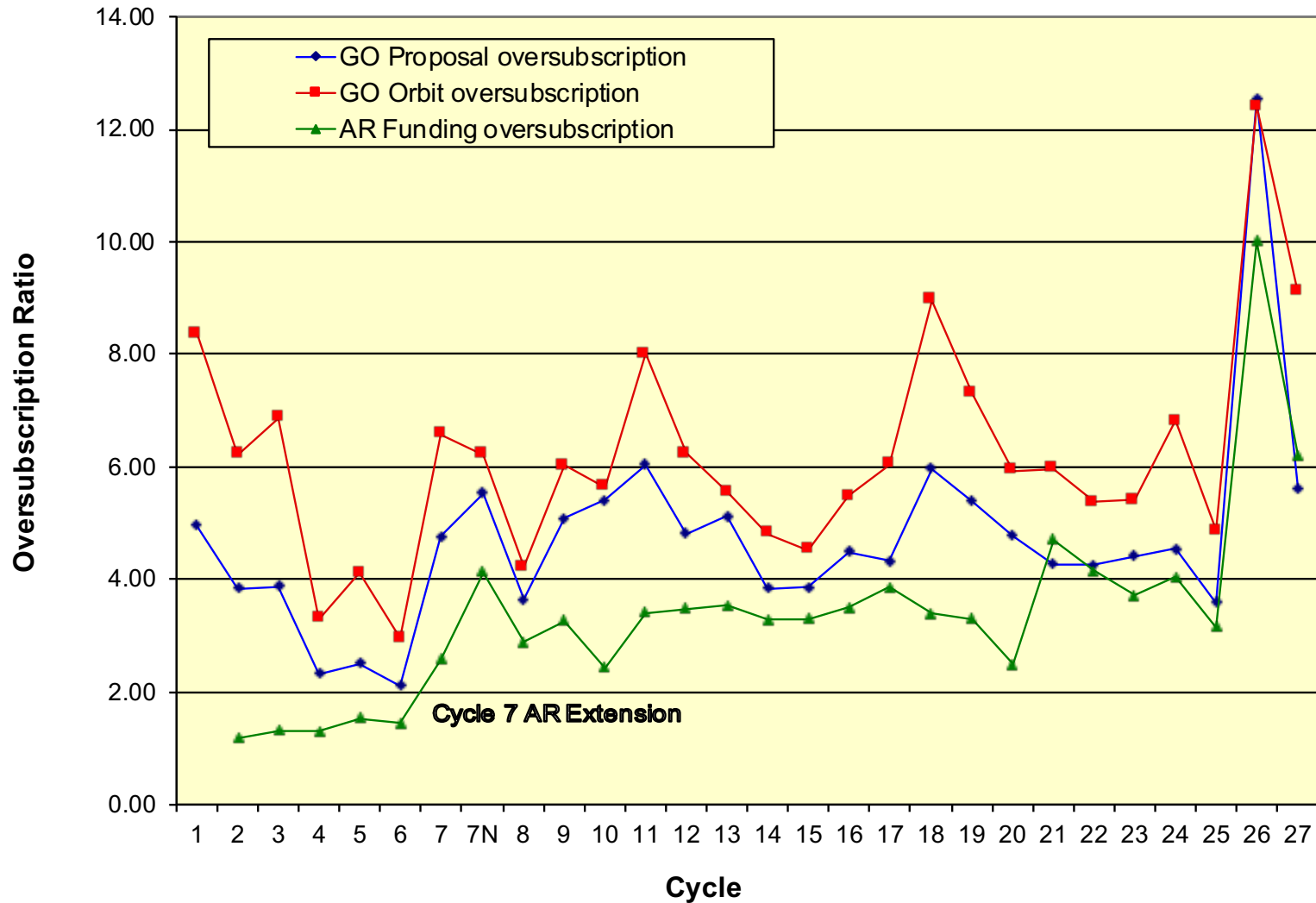
Recommended TAC Programs

ID	Resources	Science Category	Title
0113	135	Galaxies and the IGM	The COS Legacy Archive Spectroscopic Survey (CLASSY): A UV Treasury of Star-Forming Galaxies
0610	500	Galaxies and the IGM	Scylla: a pure-parallel, multi-headed attack on dust evolution and star formation in ULLYSES galaxies
0862	Legacy	Galaxies and the IGM	A subgrid model for simulating the unresolved microphysics in the circumgalactic medium
0078	Legacy	Cosmology	SKY-SURF: Panchromatic constraints on the Extragalactic Background Light and Zodiacal Light sources through all-sky foreground measurements
0772	92	Cosmology	Securing the Absolute Scale for the IR-TRGB Distance Ladder
0159	244	Stellar Populations	Tracing the 6-D Orbital and Formation History of the Complete M31 Satellite System
0295	96 + 96	Cosmology	Flashlights: Many Extremely Magnified Individual Stars as Probes of Dark Matter and Stellar Populations to Redshift $z \sim 2$
0778	100	Stellar Physics	A pure-parallel search for faint stuff in star forming regions
0260	Legacy	Galaxies and the IGM	Probing the epoch of reionization with the fossil record of nearby dwarf galaxies
0146	77	Galaxies and the IGM	METAL-Z: Metal Evolution, Transport, and Abundance at Low Metallicity (Z)
0114	51 + 26	Cosmology	Supernovae in the Infrared avec Hubble

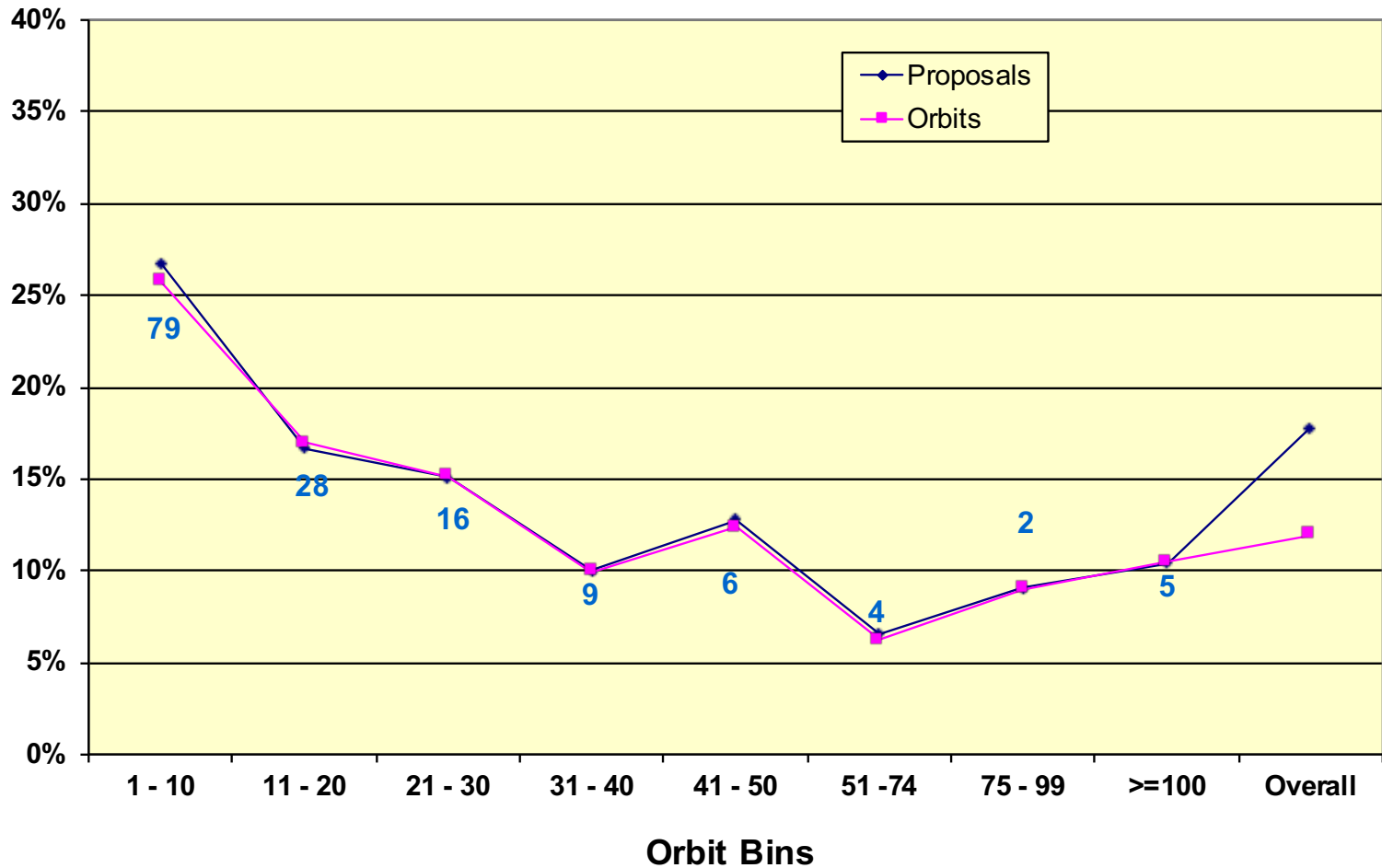
Medium Programs Recommended by the Panels

ID	Resources	Science Category	Title
0020	43	Stellar Populations	The Metallicity Distribution Functions of Ultra-Faint Dwarf Galaxies
0075	38	Galaxies and the IGM	Deep imaging and a TRGB distance for the dark matter deficient galaxy NGC1052-DF2
0177	42	Galaxies and the IGM	UV emission line spectra of $z \sim 0.3-0.4$ Lyman continuum emitters a key reference to uncover the sources of cosmic reionization
0238	56	Massive Black Holes And Their Host Galaxies	Host galaxy properties of $z \sim 0.5$ AGN with direct reverberation mapping black hole masses
0300	39	Stellar Physics	Dancing with the Dwarfs: Very High Quality Spatial and Spectral Maps of Hot Jupiters Proxies
0357	40	Galaxies and the IGM	The stellar populations of gas-rich absorbing galaxies detected with VLT/MUSE and ALMA: the essential link to the baryon cycle
0490	39	Stellar Populations	Internal Kinematics of Outer Fields in Globular Clusters: The Last Piece of the Multi-Population Puzzle
0601	48	Galaxies and the IGM	Completing the HST frontier fields legacy with a magnified cosmic noon
0632	42	Stellar Populations	A Complete Inventory of the Fireworks Galaxy's O-Type Stars
0669	42	Galaxies and the IGM	Lyman Continuum Escape in High Definition
0781	73	Stellar Physics	The K Dwarf Advantage: Assessing the Habitability of Planets Orbiting K Stars
0845	32 + 24	Stellar Populations	Cold Dark Matter and the GD-1 Stellar Stream
0861	60	Planets and Planet Formation	Seeing in 3D: Unlocking the dynamical properties of a canonical exoplanet
0888	35	Planets and Planet Formation	Mapping the distribution of the planetary debris accreted across the surface of the white dwarf G29-38
0982	49	Stellar Physics	Constraining the Stellar Astrophysics Powering Cosmic Reionization: Spectral Templates of Extremely Low-metallicity Main-sequence O-stars

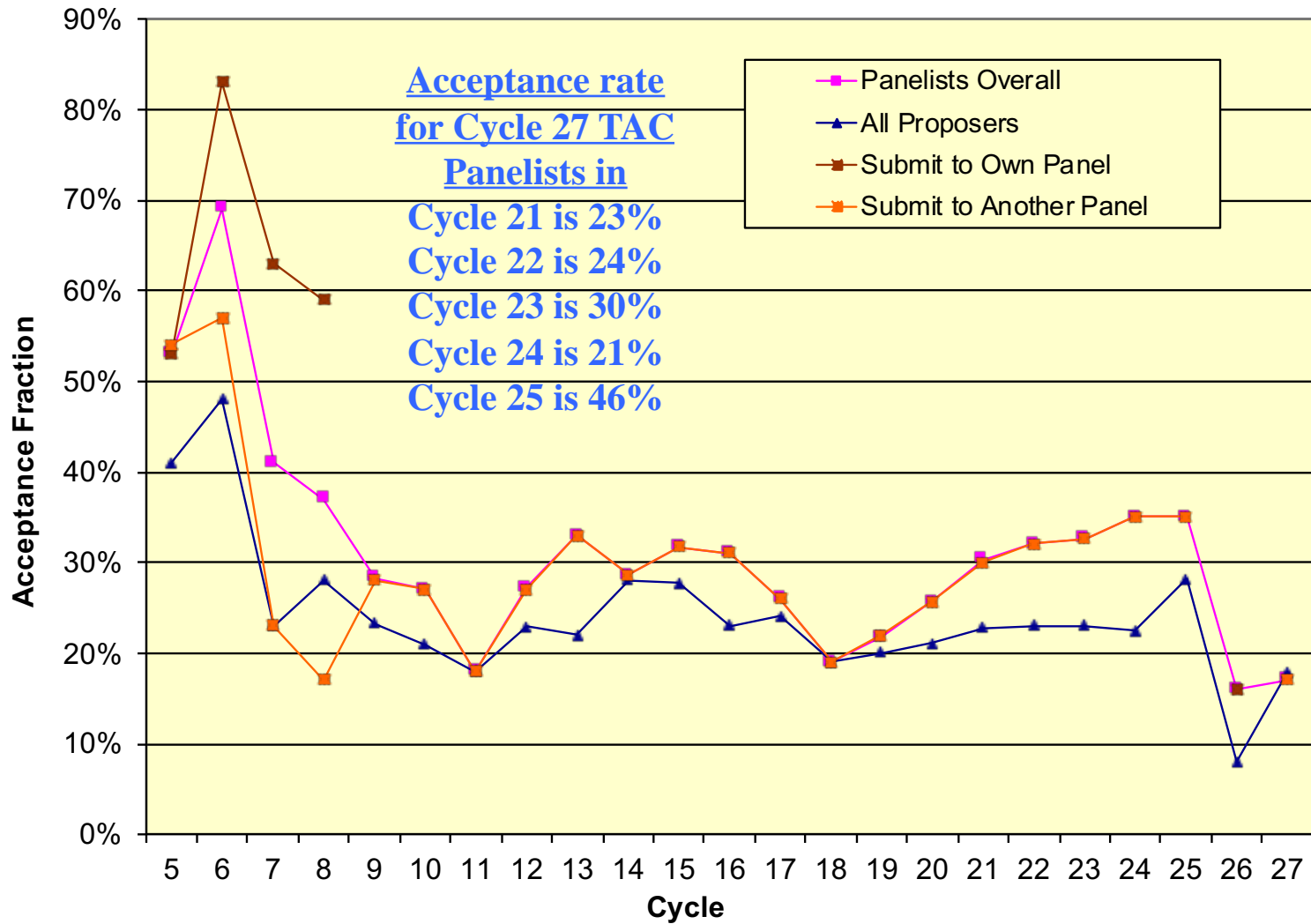
Over-subscription by Cycle



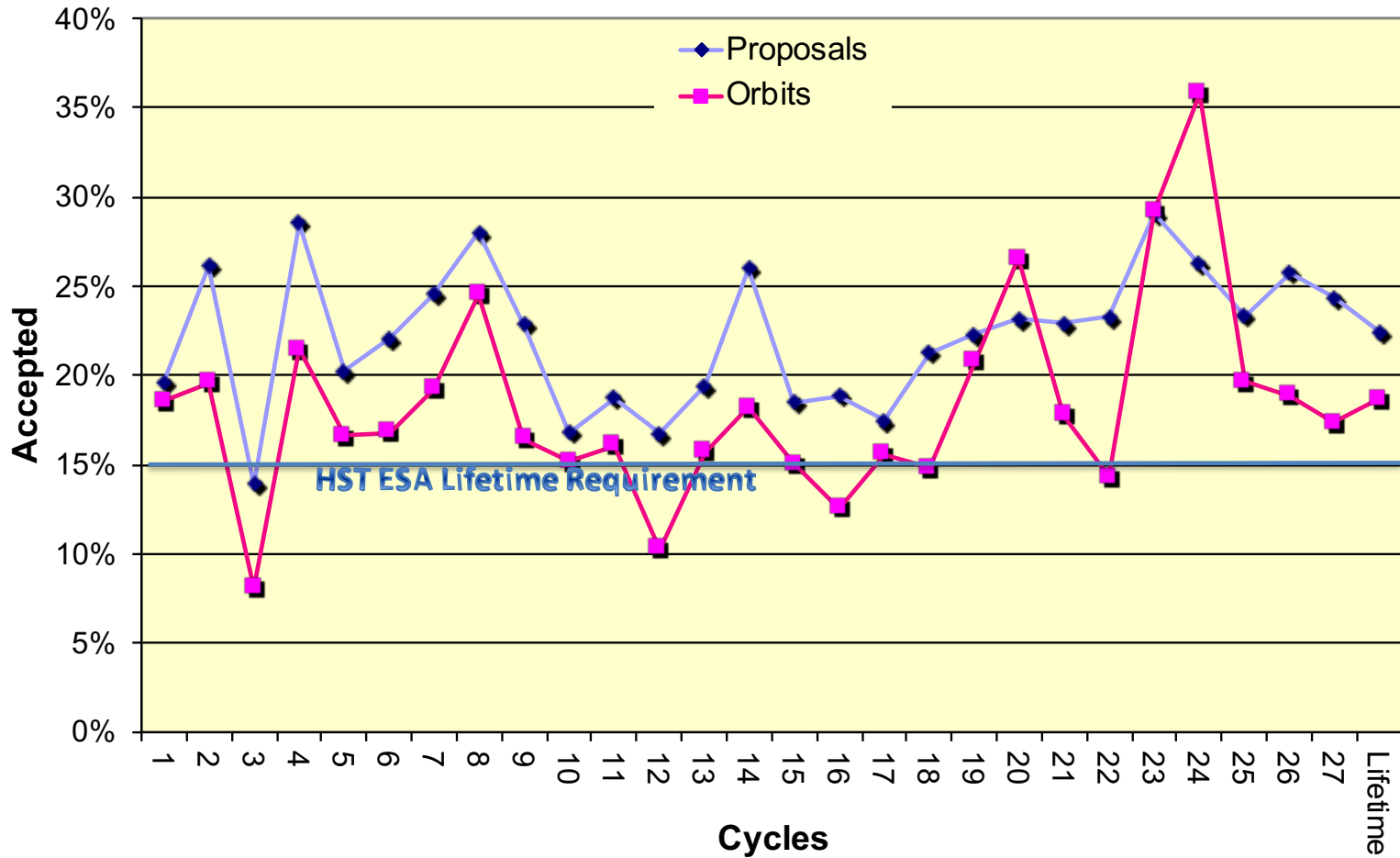
Acceptance Fraction by Size



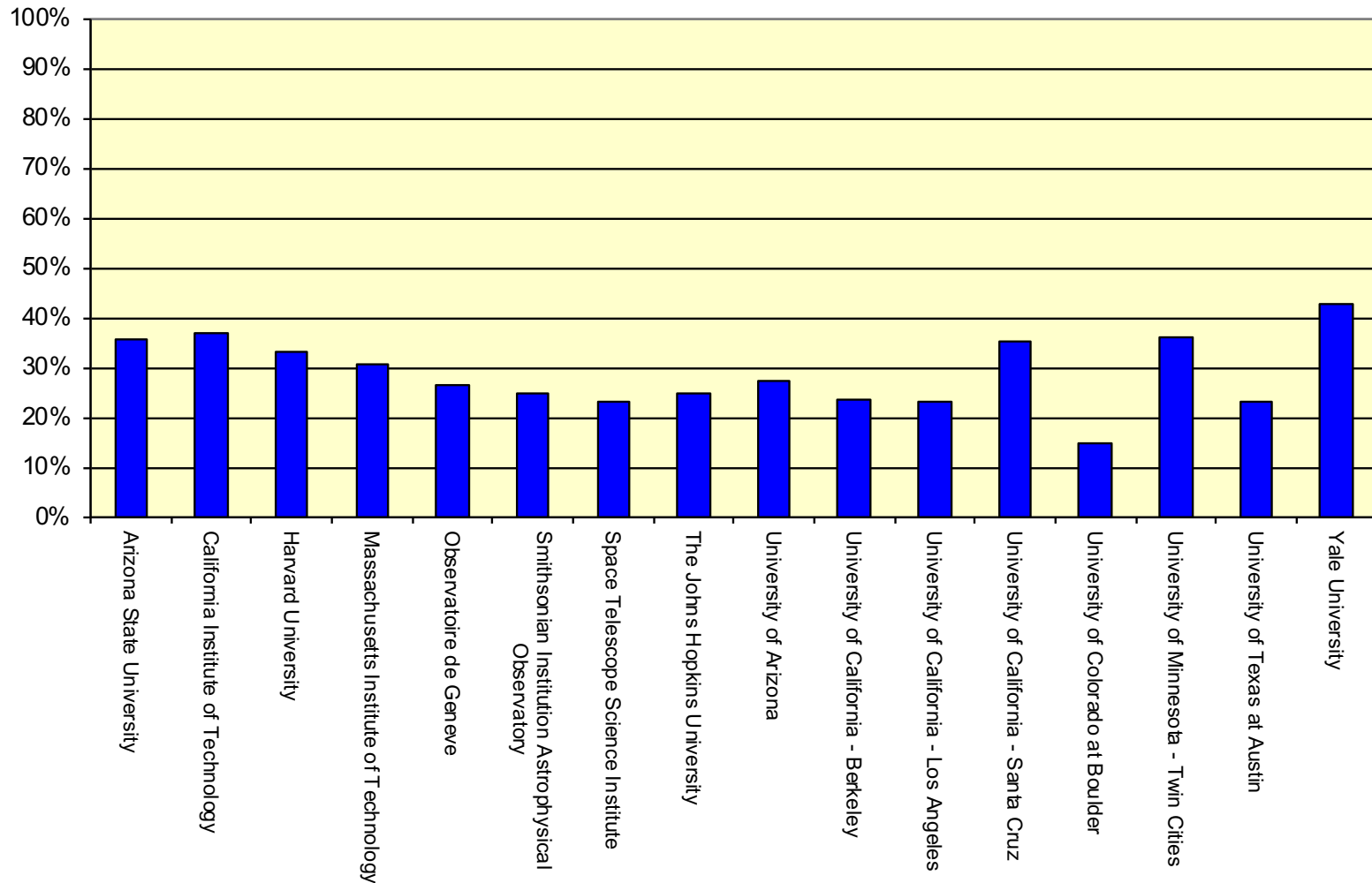
Panelist Acceptance Fraction



ESA Acceptance Fraction

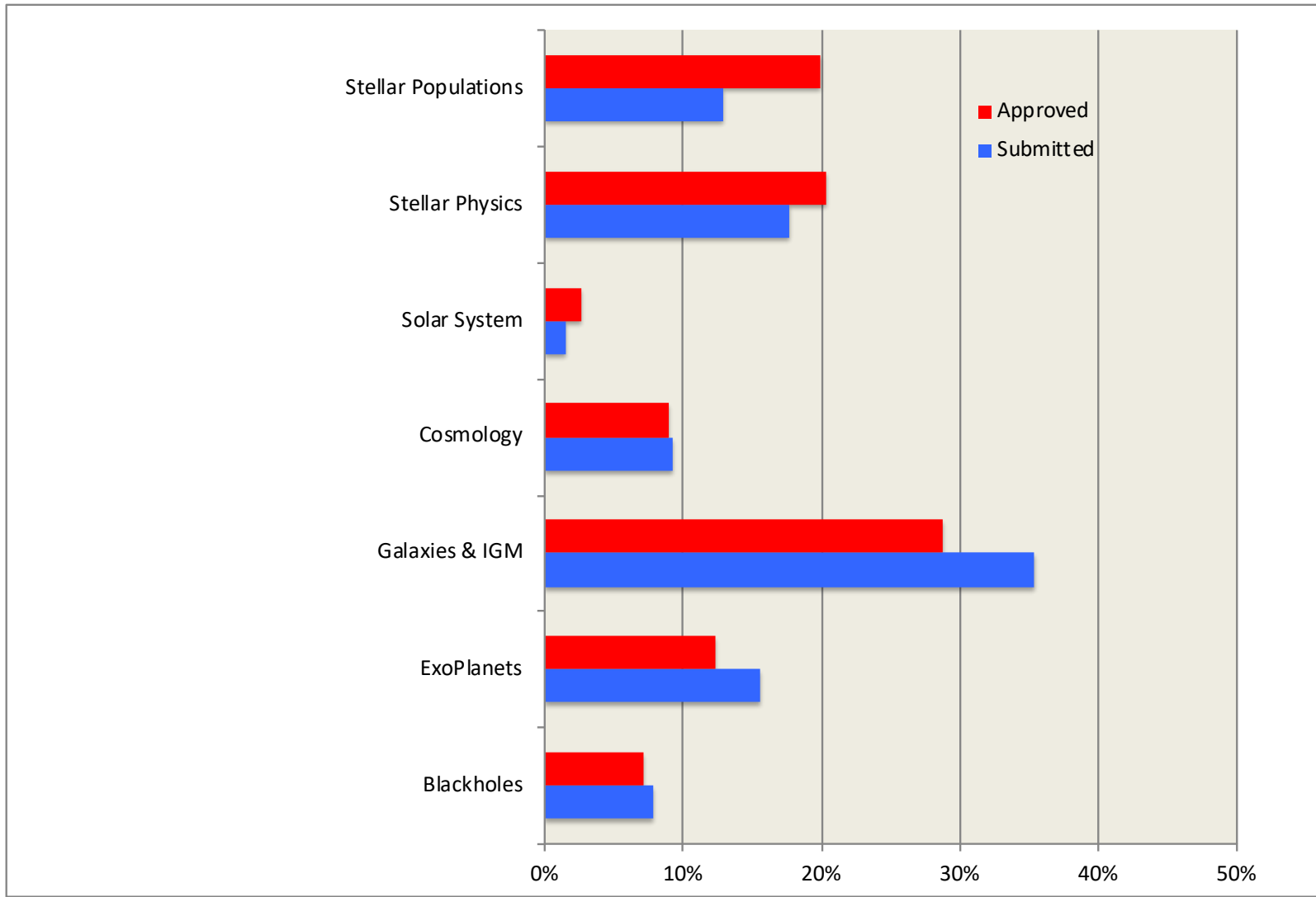


Proposal Institutional Acceptance Fraction

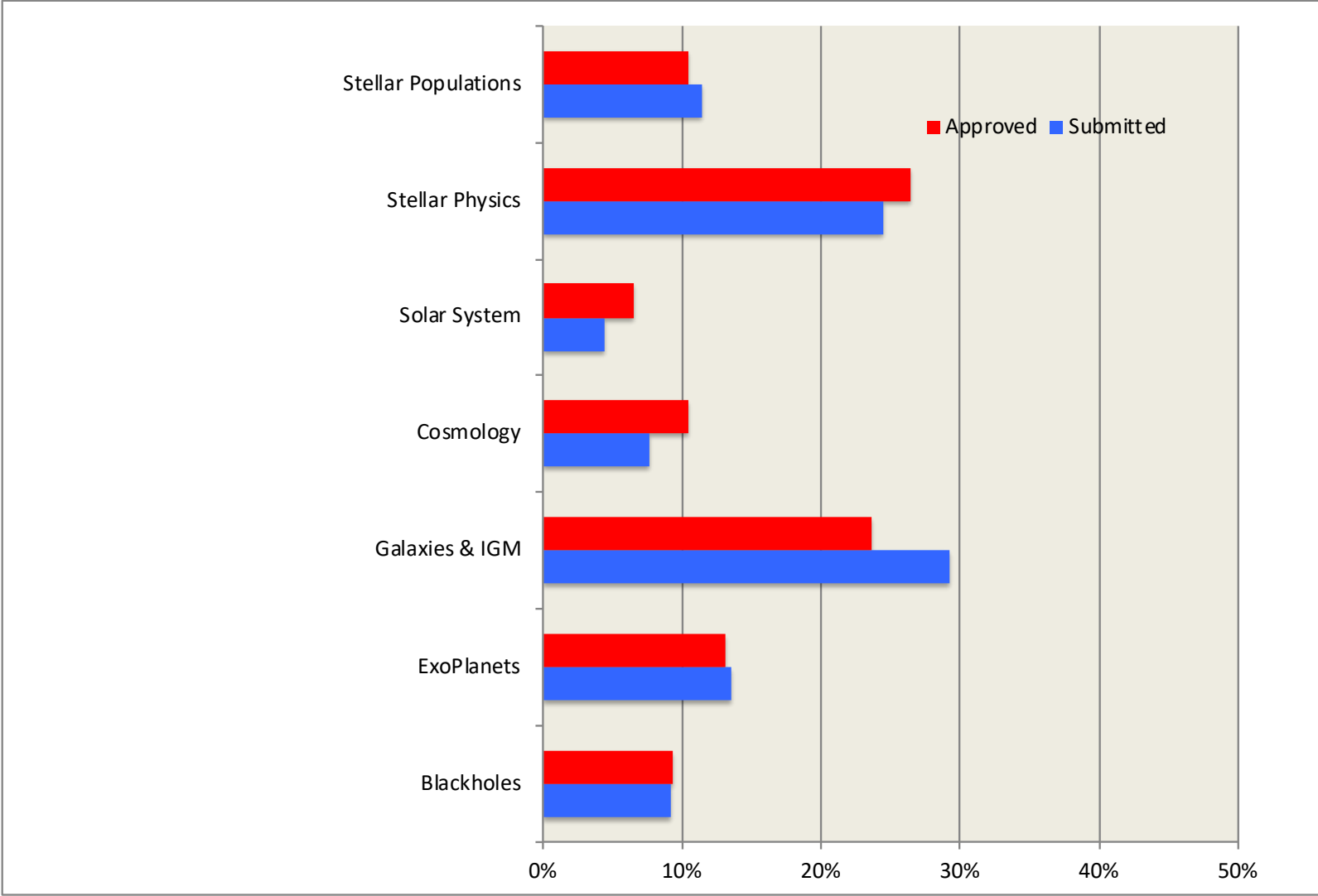


Only shows Institutions that have ≥ 3 Proposals approved
C27 TAC and Mid-Cycle Results and
C28 Preparations

Science Category Distribution for Orbits



Science Category Distribution for Proposals



Instrument Summary

Configuration	Mode	Prime %	Coordinated Parallel %	Total	Instrument Prime Usage	Instrument Prime + Coordinated Parallel Usage	Pure Parallel Usage	Snap Usage
ACS/SBC	Imaging	0.8%	0.0%	0.6%			0.0%	0.0%
ACS/SBC	Spectroscopy	0.0%	0.0%	0.0%			0.0%	0.0%
ACS/WFC	Imaging	19.1%	58.2%	28.5%			24.9%	47.7%
ACS/WFC	Ramp Filter	0.0%	0.0%	0.0%	19.9%	29.1%	0.0%	0.0%
ACS/WFC	Spectroscopy	0.0%	0.0%	0.0%			0.0%	0.0%
COS/FUV	Spectroscopy	23.2%	0.0%	17.6%			0.0%	0.0%
COS/NUV	Imaging	0.3%	0.0%	0.3%	27.7%	21.1%	0.0%	0.0%
COS/NUV	Spectroscopy	4.2%	0.0%	3.2%			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	1.5%	0.0%	1.1%			0.0%	0.0%
STIS/CCD	Spectroscopy	3.5%	0.0%	2.6%			0.0%	0.0%
STIS/FUV	Imaging	0.0%	0.0%	0.0%	12.3%	9.3%	0.0%	0.0%
STIS/FUV	Spectroscopy	3.4%	0.0%	2.6%			0.0%	0.0%
STIS/NUV	Imaging	0.0%	0.0%	0.0%			0.0%	0.0%
STIS/NUV	Spectroscopy	3.9%	0.0%	3.0%			0.0%	0.0%
WFC3/IR	Imaging	10.4%	3.6%	8.7%			26.4%	29.1%
WFC3/IR	Spectroscopy	9.4%	0.0%	7.2%	40.1%	40.5%	6.2%	0.0%
WFC3/UVIS	Imaging	18.7%	38.2%	23.4%			42.5%	23.2%
WFC3/UVIS	Spectroscopy	1.6%	0.0%	1.2%			0.0%	0.0%
		100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

UV Initiative

- ◇ Target was 40% for panels and 50% for TAC
- ◇ Overall 45% for UV Proposals and 51% for orbits recommended
 - ⇒ 51% of TAC are UV Orbits
 - ▷ (total orbit request not all UV)
 - ⇒ 1373 of 2686 Orbits Recommended
 - ⇒ 11 of 40 ARs; 71 of 388 GOs

Targets of Opportunity

ID	Orbits	Disruptive Activations	Non-Disruptive Activations	Total Activations	Multi-Cycle	Type of ToO
0050	17	1	0	1	Yes	White Dwarf Nova
0085	10	1	0	1	Yes	Kilonova Short GRB
0114	51	0	24	24	Yes	Type Ia Supernova
0224	6	1	0	1		Type Ibn Supernova
0274	2	1	0	1	Yes	Type Ia Supernova
0381	2	1	0	1	Yes	Jupiter or Saturn Impact
0417	6	2	0	2	Yes	High Z GRB
0465	18	1	0	1	Yes	Superluminous Supernova
0558	19	1	0	1		Ultra Rapid TESS Supernova
0567	16					
		2	0	2		Gravitational Wave
0741	6	1	0	1		Comet
	153	12	24	36		

Chandra Coordinated Proposals

- 12 GO Proposals were submitted for 690 HST Orbits and 1617 ksecs of Chandra time.
 - Panels recommend 1 for 29 HST Orbits and 90 ksecs of Chandra time
 - 1005 Monsters in the making: extreme cluster mergers at $z > 0.5$

XMM-Newton

Coordinated Proposals

- 13 GO Proposals were submitted for 557 HST Orbits and 797 Ksecs of XMM-Newton time
 - Panels recommend 1 proposals 10 HST Orbits and 40 Ksecs of XMM
 - 0185 The evolving magnetic lives of young Suns

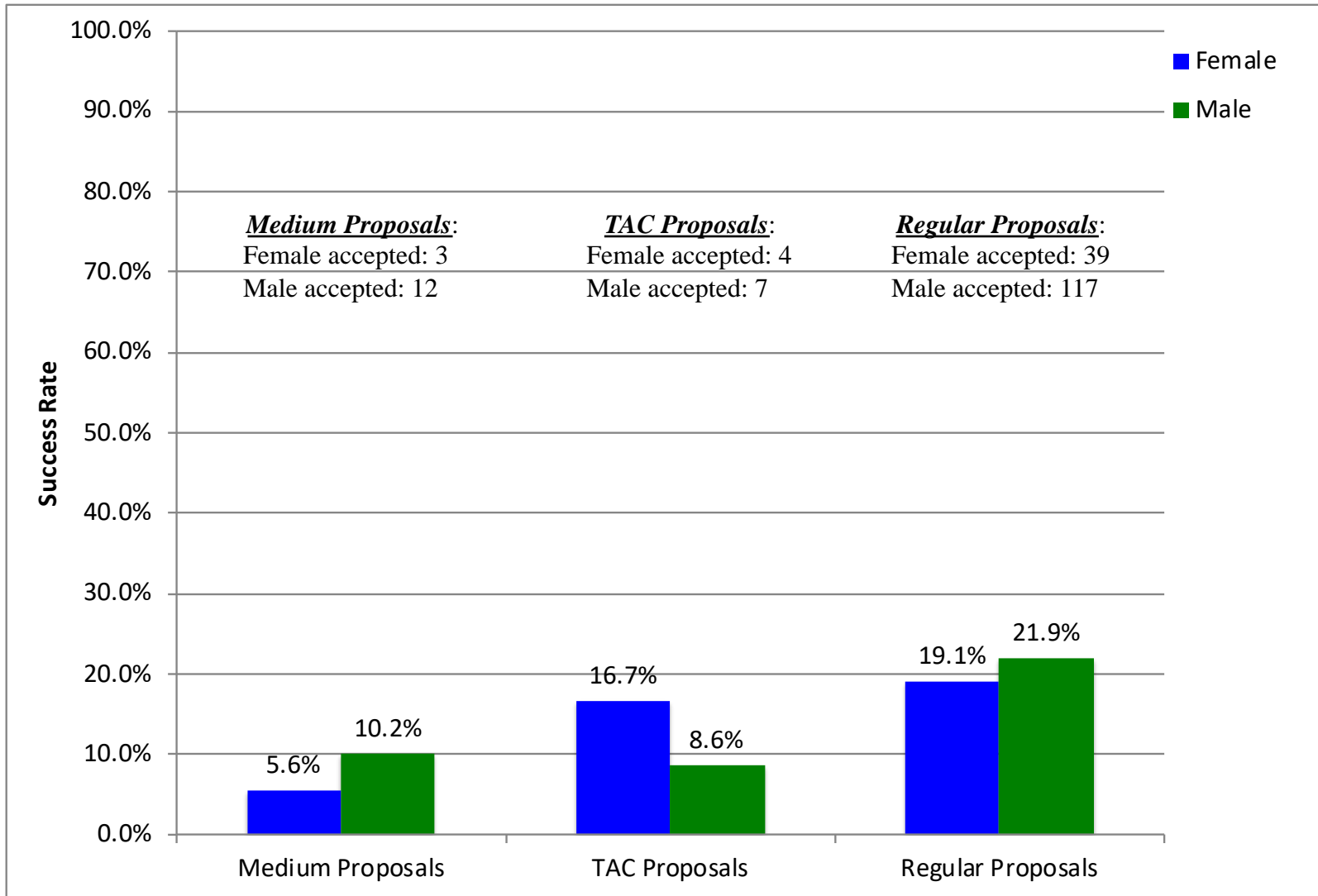
NOAO Coordinated Proposals

- 14 GO Proposals were submitted for 768 HST Orbits and 45.8 NOAO nights
 - Panels recommend 2 for 70 HST Orbits and 5.4 NOAO Nights
 - 0114 Supernovae in the Infrared avec Hubble
 - 0558 Ultra-Rapid UV Spectroscopy of an Interacting Supernova Discovered by TESS

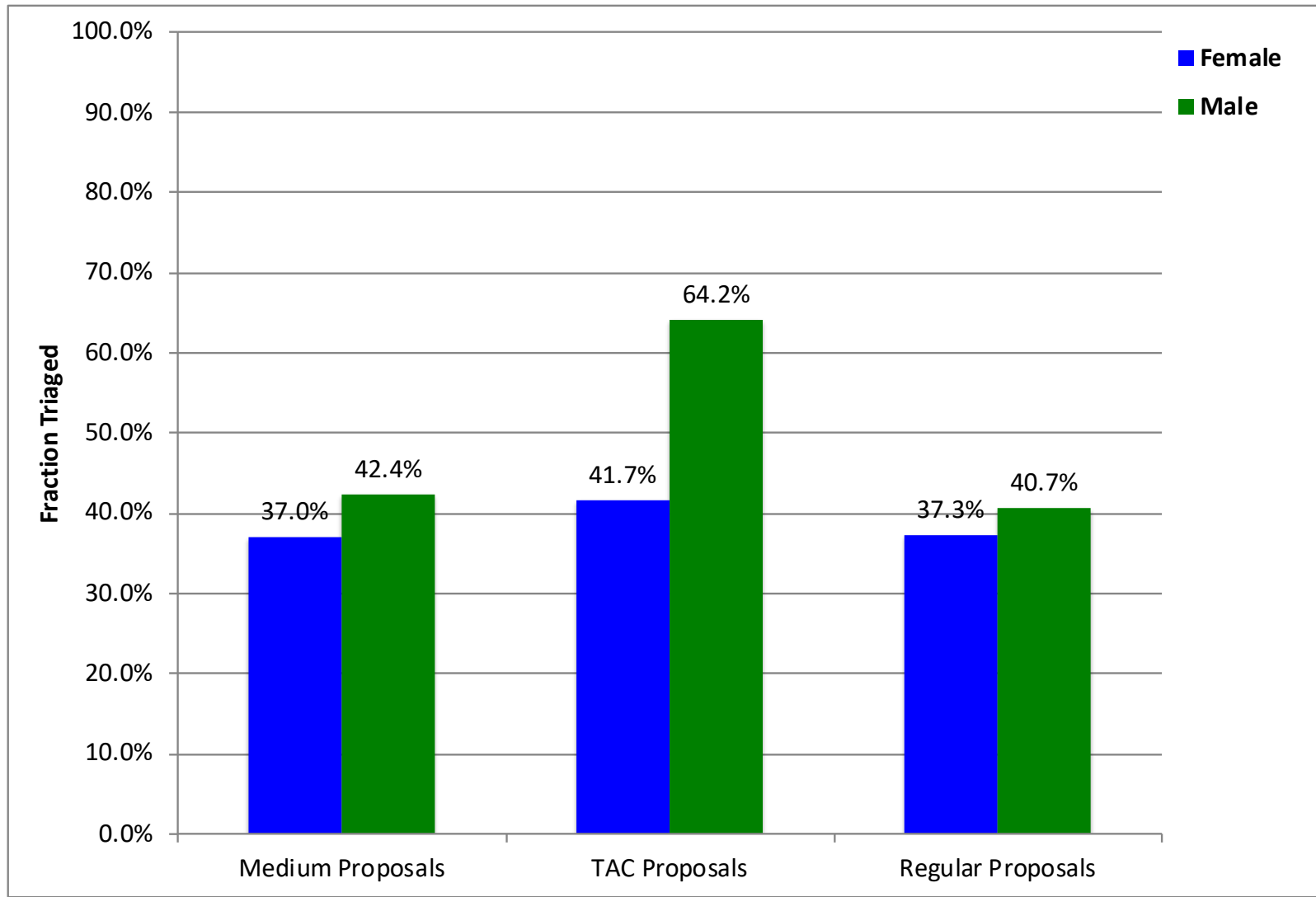
NRAO Coordinated Proposals

- 10 GO Proposals were submitted for 48 HST Orbits and 384.1 NRAO Hours
 - Panels recommend 2 for 6 HST orbits and 30.1 NRAO hours
 - 0191 The Nature and Origin of Compact High-Velocity Clouds
 - 0228 A case study for JWST: Disentangling auroral and cloud variability in early L dwarfs

Gender Success Rates



Triage - Gender Distribution



C27 Mid-Cycle Review Process

- Reviewers were selected from the Cycle 27 Investigator pool
 - Over 500 were asked to participate
 - 153 responded that they were available
 - 94 were utilized for this review with 5 reviewers per proposal; 35 F/59 M
 - 59 remaining we have asked to serve for Round 2

Process (cont.)

- Proposals are graded against Scientific Merit, Importance to Astronomy and Urgency
 - 1 Excellent to 5 Poor Scale
 - Final Grade is the average of the individual grades

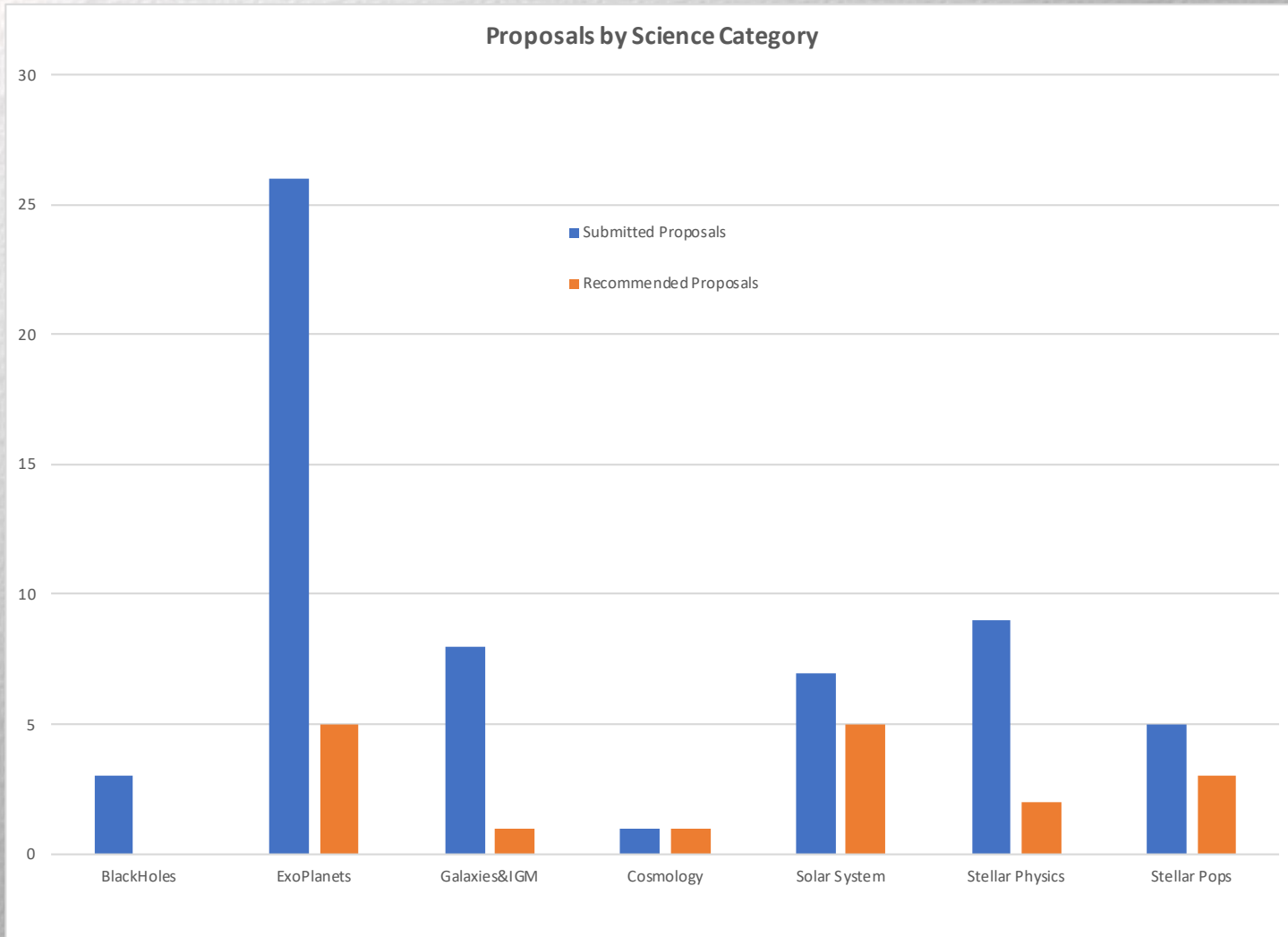
Cycle 27 Mid-Cycle Results

- 59 Proposals Reviewed for 487 Orbits
 - 17 Proposals recommended for 154 orbits
 - Acceptance Rate: 3.4 for proposals and 3.2 for orbits
- Instrument breakdown: ACS (19%), COS (37%), STIS (2%), and WFC3 (43%)
- Imaging (38%) and Spectroscopy (62%)
- ESA acceptance fraction:
 - PIs 29% for proposals and 27% orbits
 - ESA Cols are 23% of the total Cols
- UV Initiative: 47% for Proposals and 48% for Orbits
- TESS related Proposals: 9 submitted and 2 approved

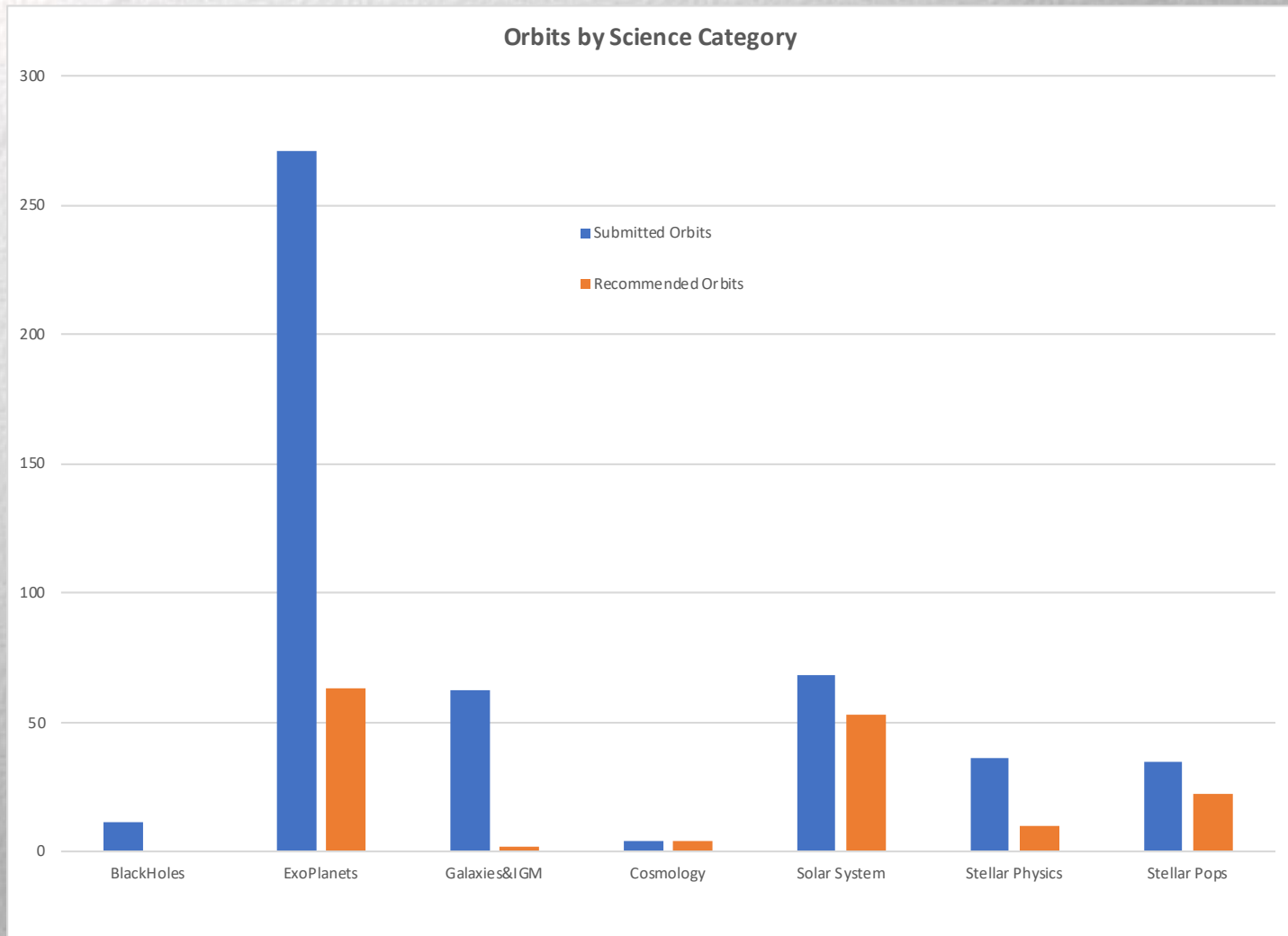
Mid-Cycle Accepted Proposals

ID	PI First Name	PI Last Name	PI Institution	Orbits	Title
16049	Dennis	Bodewits	Auburn University	15	HST/COS chemical inventory and activity of interstellar object 2I/Borisov
16040	Bryce	Bolin	California Institute of Technology	6	Constraining the coma volatile content of interstellar comet 2I/Borisov
16047	Joel	Bregman	University of Michigan	1	A SN Ia Event in a Globular Cluster of a Nearby Galaxy
16033	Cynthia	Froning	University of Texas at Austin	10	UV Spectroscopy of LTT1445A: Evaluating the Energetic Irradiance on a Nearby Terrestrial Exoplanet
16034	Boris	Gaensicke	The University of Warwick	10	Dissecting the evaporating atmosphere of a giant planet in a close orbit around a white dwarf with COS ultraviolet spectroscopy
16035	Nicola	Gentile Fusillo	The University of Warwick	14	Exploring evolved planetary systems: three new gaseous debris discs
16041	David	Jewitt	University of California - Los Angeles	3	Interstellar Comet C/2019 Q4 (Borisov)
16042	Andrew	Levan	Radboud Universiteit Nijmegen	7 + 5	Do collapsars make the heavy elements: A sensitive search in a nearby gamma-ray burst?
16038	Michael	McDonald	Massachusetts Institute of Technology	2	Imaging a Rare Starburst Central Galaxy in a Merging Cluster
16048	Kristen	McQuinn	Rutgers the State University of New Jersey	13	Extremely Metal Poor Galaxies: Understanding the Boundaries of Galaxy Evolution
16043	Karen	Meech	University of Hawaii	14	Characterization of the second interstellar object
16039	David	Sing	The Johns Hopkins University	14	Characterizing the outstanding super-Earth LTT 1445Ab
16045	Linda	Smith	Space Telescope Science Institute - ESA	8	COS observations of a very young massive star cluster in the blue compact dwarf galaxy NGC 5253
16037	Mauro	Stefanon	Universiteit Leiden	4	Securing a sample of exceptionally bright $z \sim 9$ galaxies to prepare for JWST and probe early galaxy assembly
16046	Paula	Szkody	University of Washington	3	Understanding the Instability Strip of Accreting Pulsating White Dwarfs: Followup to a Recent COS Result
16044	Qicheng	Zhang	California Institute of Technology	15	Polarimetry of New Interstellar Comet 2I/Borisov
16036	Yifan	Zhou	University of Texas at Austin	15	Mapping Clouds on a Variable Planetary-Mass Companion

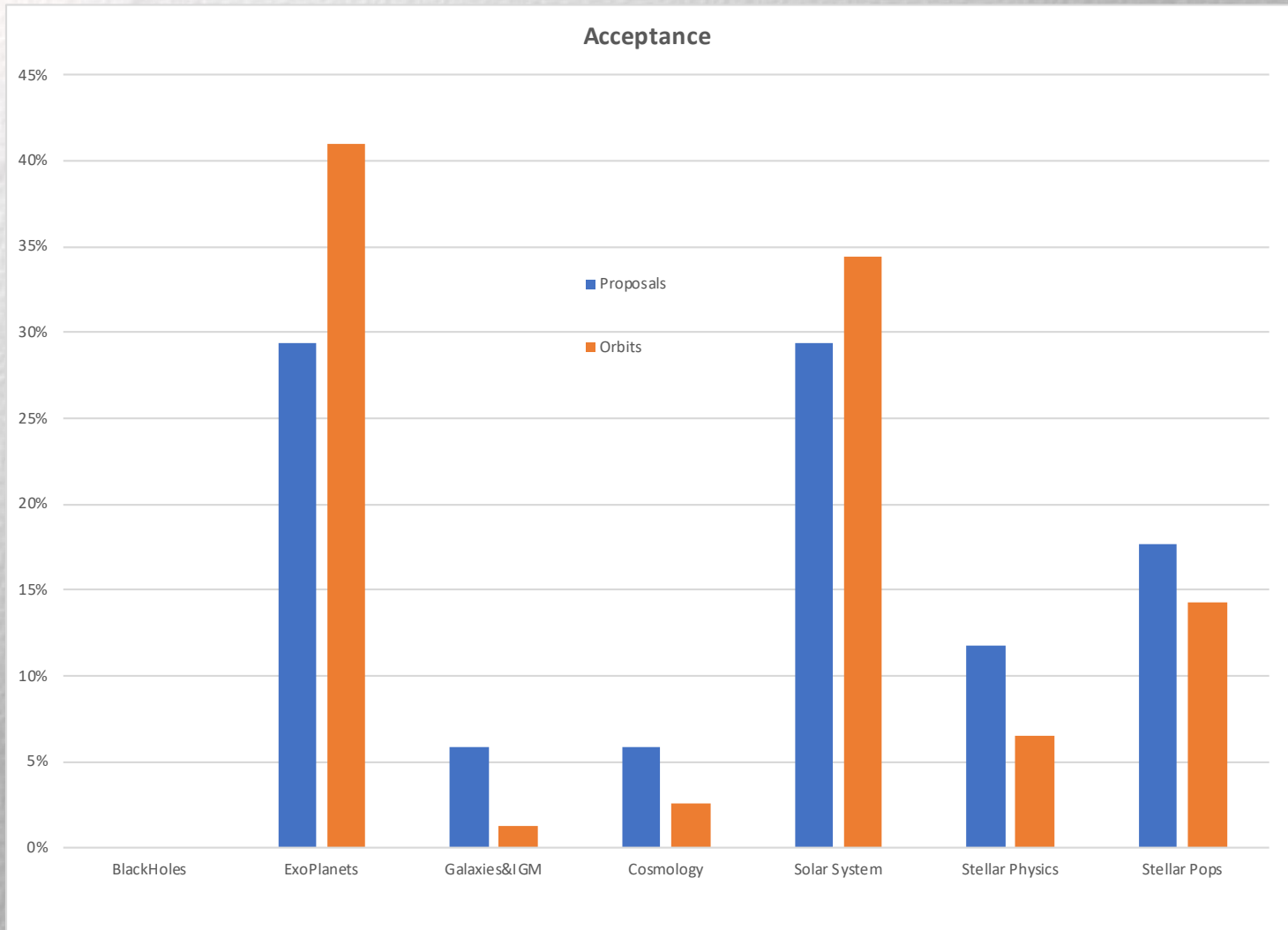
Mid-Cycle Results by Science Category



Mid-Cycle Results by Science Category



Mid-Cycle Results by Science Category



Gender

	Submitted	Recommended	
Female	20	5	25%
Male	39	12	31%

Submitted: M/F = 66% / 34%

Recommended: M/F = 71% / 29%

Cycle 28 Preparations

- Cycle 28 will start on **10/1/20** and end on **9/30/21**
- The Cycle 28 HST TAC will have a hybrid structure with local and remote panelists reviewing Small proposals.
- The reviews will again be double-blind.
- All five instruments will be offered (if operational): ACS, COS, FGS, STIS, WFC3
- The proposal review will be held at the STScI Muller and Rotunda locations
- The same proposal categories as in C27 will be offered

Hybrid Panels

- Hybrid approach: dividing proposals between external review and on-site discussion.
- External reviewers will provide the assessment and grading of a subset (< 16 orbits) of Small proposals including SNAP and AR.
 - **These proposals are ranked based solely on the external reviews.**
- One-site panels reviews for remaining Small proposals, Medium, AR Legacy, Large and Treasury
 - **These proposals are ranked solely by the on-site panels.**
- Exception – all Solar System proposals will be reviewed by the on-site panel (due to the small proposal pool)

Cycle 28 Panels

(Small and Medium Proposals)

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

Cycle 28 Plans (cont.)

- Chairs and Vice-Chairs for all 8 panels have been selected.
- Each panel will have 7 Panelists and a Chair and Vice-Chair. Solar system will not have a Vice-Chair.
- The Panel Chairs and Vice-Chairs and 3 At-Large members will form the TAC chaired by **Amy Simon** (GSFC).
- Candidate Panelists are being contacted.

Available Orbits in Cycle 28

- Roughly **2700** orbits available for Cycle 28 GOs
- Provisional break-down:
 - **600** orbits for the TAC (**Large** and **Treasury**)
 - **1400** orbits for the 8 Panels (**Small** GO with <35 orbits)
 - **700** orbits will be allocated for **Medium** proposals (35 – 74 orbits)
 - An additional 1000 Snapshot observations and 500 Pure-Parallel observations may be allocated
 - Distribution may be adjusted based on proposal pressure

Cycle 28 Proposal Review Schedule

- *12/02/19*: Call for Proposals release
- *03/06/20*: Phase I Proposal deadline
- *03/25/20*: Proposals made available to panels
- *04/24/20*: Grades and reviews due from panelists
- *05/05/20*: Triage results available to panels
- *05/11/20 – 05/15/20*: Panels and TAC meet
- *05/29/20*: Notifications sent out
- *06/30/20*: Phase 2 and budget deadlines