Cycle 30 TAC Results

and

Cycle 31 Preparations

TAC Process in Cycle 30 (1)

- **Hybrid process**: proposals were split between external panels and virtual panels meeting by video-conference.
- **External panelists** provided the assessment and grading of a subset of Small GO proposals (1 – 15 orbits) including Snapshot and Archival proposals (except for two panels with only AR in order to balance proposal load).
- **Virtual panels** reviewed the remaining Small GO, Medium, Archival Legacy, Large and Treasury proposals. Virtual panelists interacted by video-conference.
- Exception – all Solar System proposals were reviewed by the virtual panel (due to the small proposal pool)

TAC Process in Cycle 30 (2)

Proposals reviewed by **virtual group panels**:

- There were eight panels, with 11 – 16 members, including Chair and Vice-Chair (no Vice-Chair in Solar System).
- Each panel was allocated an allocation for Medium proposals based on orbit pressure, and an orbit allocation for Small proposals based on proposal and orbit pressure.
- The panel Chairs and Vice-Chairs, together with the TAC Chair and three At-Large members, constituted the Executive Committee that reviewed Large/Treasury/Legacy proposals.
- The Executive Committee met by video-conference as well.

Cycle 30 TAC Summary Results

Category	**Requested**	**Approved**	**Percentage Approved**	**ESA Approved**	**ESA Approved Percentage**
GO Proposals	874	155	17.7%	44	28.4%
Snapshots	41	8	19.5%	3	37.5%
Archival	92	29	31.5%	1	0.0%
AR Legacy	14	4	28.6%	0	0.0%
Theory	34	8	23.5%	0	0.0%
Total	1,055	204	19.3%	48	28.8%
Primary Orbits	**19,842**	**3,470**	**17.5%**	**1,322**	**38.1%**

Programs recommended by the Executive Committee

ID	Resources	Science Category	Title
2844	80	Intergalactic Medium and the Circumgalactic Medium	A Systematic Search for Wind-CGM Interactions in Star-forming Galaxies
2851	AR	Galaxies	The Local Group legacy database of HST photometry
2868	8 + 8	Exoplanets and Exoplanet Formation	The 25,000-Lightcurve HST-Kepler Treasury Survey
3132	400 PPAR	Galaxies	The Parallel Ionizing Emissivity Survey
3137	105 + 30	Large Scale Structure of the Universe	Reducing Type Ia Supernova Distance Biases by Separating Reddening and Intrinsic Color
3152	19	Stellar Populations and the Interstellar Medium	An HST Treasury of Stellar Feedback in Action: Sizes, Structures, and Power Sources for 50,000 Extragalactic HII Regions
3206	130	Stellar Physics and Stellar Types	A Treasury FUV Survey of the Hottest White Dwarfs
3280	AR	Solar System Astronomy	Investigating Sulfur Abundances and Distributions in UV Comet Observations
3341	122	Exoplanets and Exoplanet Formation	Hubble Ultraviolet-optical Survey of Transiting Legacy Exoplanets (HUSTLE) treasury program
3366	116 + 89	Exoplanets and Exoplanet Formation	The SPACE Program: a Sub-neptune Planetary Atmosphere Characterization Experiment
3435	AR	Exoplanets and Exoplanet Formation	A complete, uniform, and astrometrically calibrated optical image library of all debris disk stars targeted with HST coronagraphy
3481	AR	Galaxies	An Archival Far-Ultraviolet Legacy Survey of the GOODS and COSMOS Fields: Completing the Census of the UV Sky
3485	119	Galaxies	The Lyman-alpha and Continuum Origins Survey (LaCOS)
3505	96	Intergalactic Medium and the Circumgalactic Medium	The Circumgalactic Medium of Dwarf Galaxy Pairs
3569	409 Targets	Galaxies	Post-starbursts from DESI: Timing quenching and morphological transformation at $1 < z < 1.3$

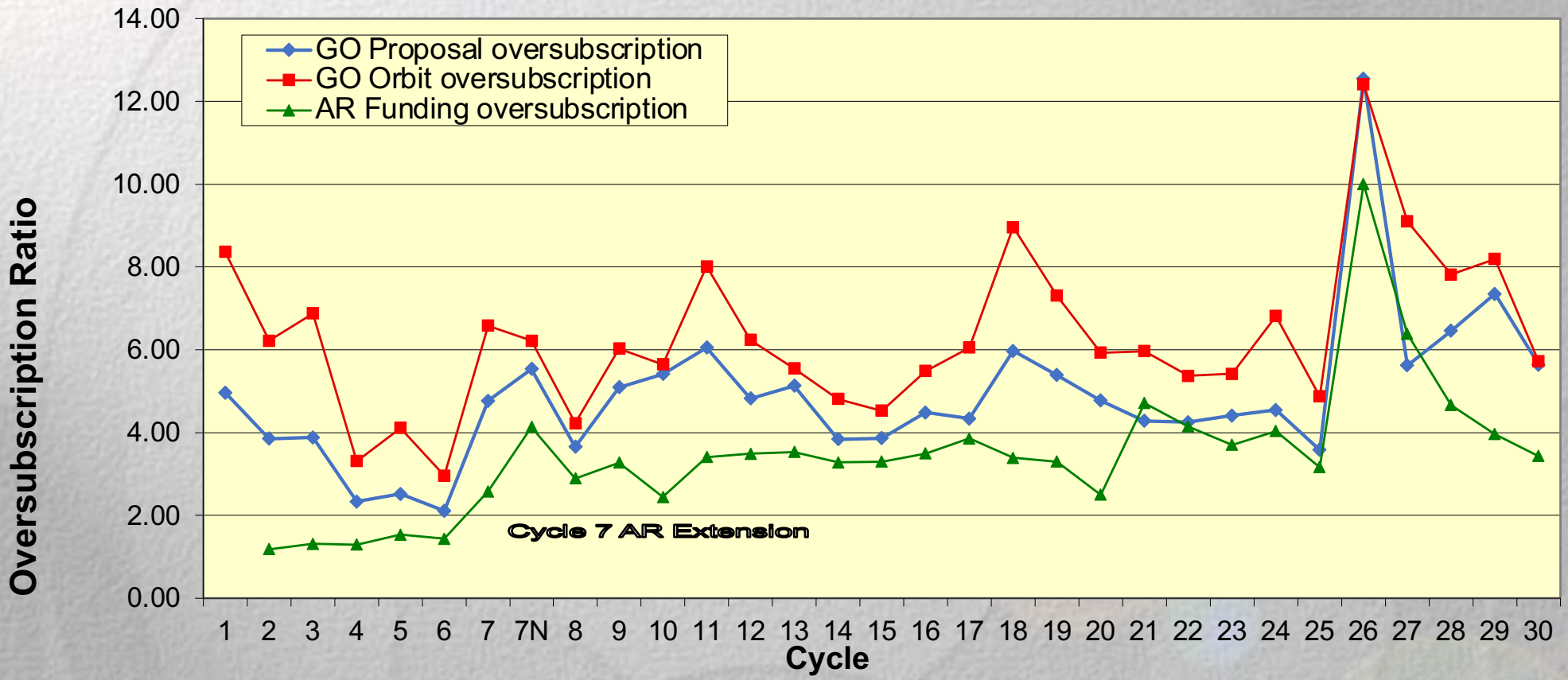
Medium Programs recommended by the Panels I

ID	Resources	Science Category	Title
02859	60	Exoplanets and Exoplanet Formation	Multiplicity among free-floating planets
03662	66	Exoplanets and Exoplanet Formation	How diverse is the bulk composition of exoplanetary material?
03017	42	Galaxies	A Novel View of Local Star-Forming Galaxies With COS
03046	37	Galaxies	Sharpening our High-z Toolset: Spatially Resolving UV Emission Line Diagnostics Throughout Pristine Gas
03058	36	Galaxies	Caught in the Act: The Hierarchical Formation of Abell 1185
03169	38	Galaxies	Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at z~2.2
03194	50	Galaxies	Probing the Gas in and around Local Galaxies Mapped with Integral Field Spectroscopy
03320	49	Galaxies	Resolving Lyman Alpha emission in a complete sample of Lyman Continuum leakers and non-leakers
03708	35	Galaxies	Preparing to find the sources of the reionization: Testing MgII as a Lyman Continuum tracer using a unique mock JWST sample
02747	52	Intergalactic Medium and the Circumgalactic Medium	The C IV in L* galaxies (CIViL*) survey -- Pinpointing the physical conditions and evolutionary stages of gaseous halos
03110	56	Intergalactic Medium and the Circumgalactic Medium	Search for feedback signatures in massive blue galaxy halos
03450	36	Intergalactic Medium and the Circumgalactic Medium	A High-Definition View of the Baryon Cycle in Massive Galaxies
03568	48	Intergalactic Medium and the Circumgalactic Medium	Unique Constraints on the Physics of Circumgalactic Gas from Ultrahigh Resolution Observations of Galactic High-Velocity Clouds

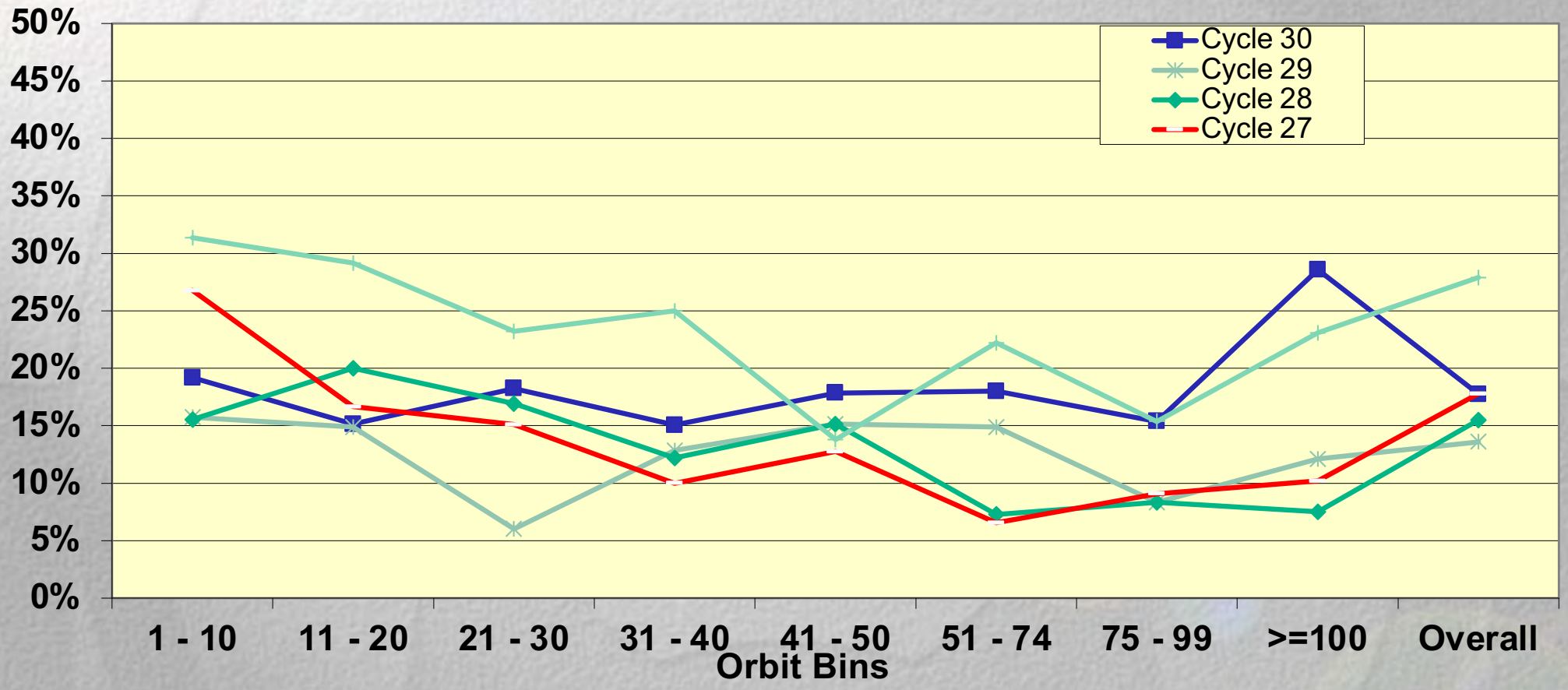
Medium Programs recommended by the Panels II

ID	Resources	Science Category	Title
02829	74	Large Scale Structure of the Universe	TRGB and Cepheid distance scales: is there local tension?
03215	30 + 28 + 9	Stellar Physics and Stellar Types	Tripling the sample of late-time Type Ia supernovae
03281	60	Stellar Physics and Stellar Types	Fission of Transuranic Nuclei: A Potential Observational Signature in Metal-Poor Stars
03694	35	Stellar Physics and Stellar Types	Fundamentally More: Quadrupling the sample of CALSPEC fundamental white dwarfs
02945	68	Stellar Populations and the Interstellar Medium	Establishing a 1% anchor for the Population II Distance Ladder with HST and Gaia
03269	62	Stellar Populations and the Interstellar Medium	Characterization of internal chemical spread in outer halo globular clusters
03364	44	Stellar Populations and the Interstellar Medium	Signatures of neutron star mergers hidden in Gaia Enceladus?
02755	63	Supermassive Black Holes and Active Galaxies	Accurate Distances to Canonical Seyferts

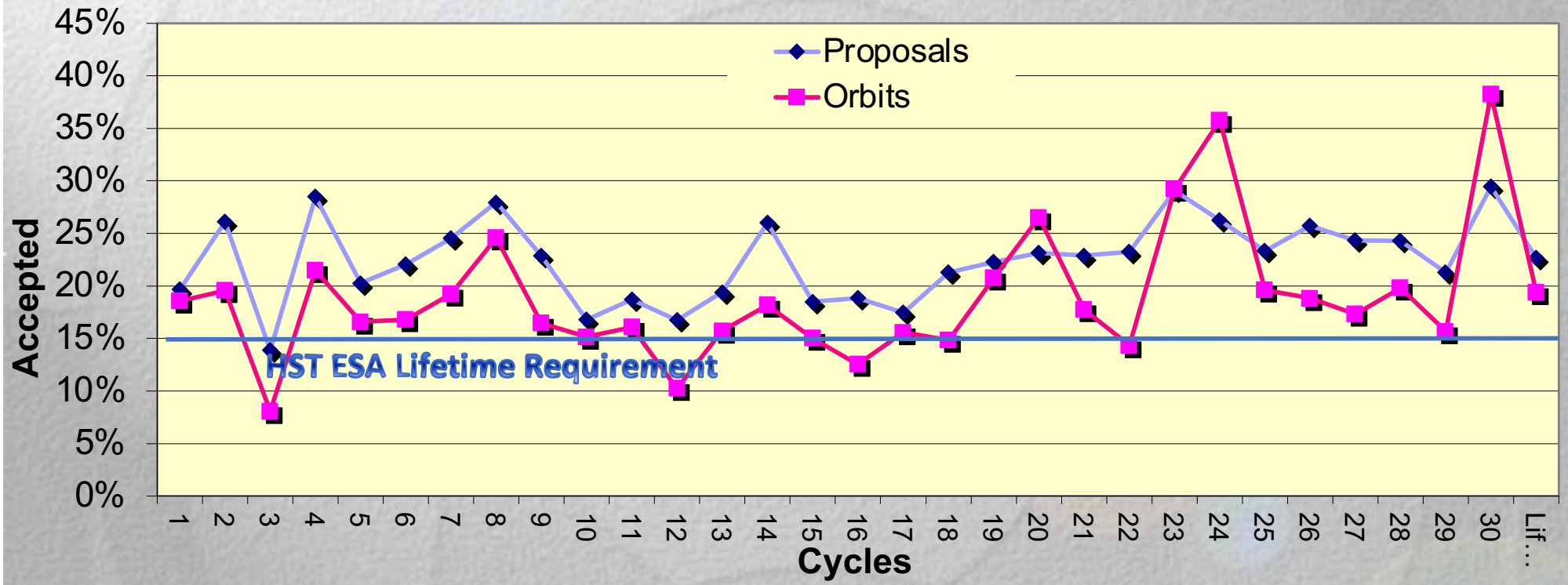
Oversubscription by Cycle



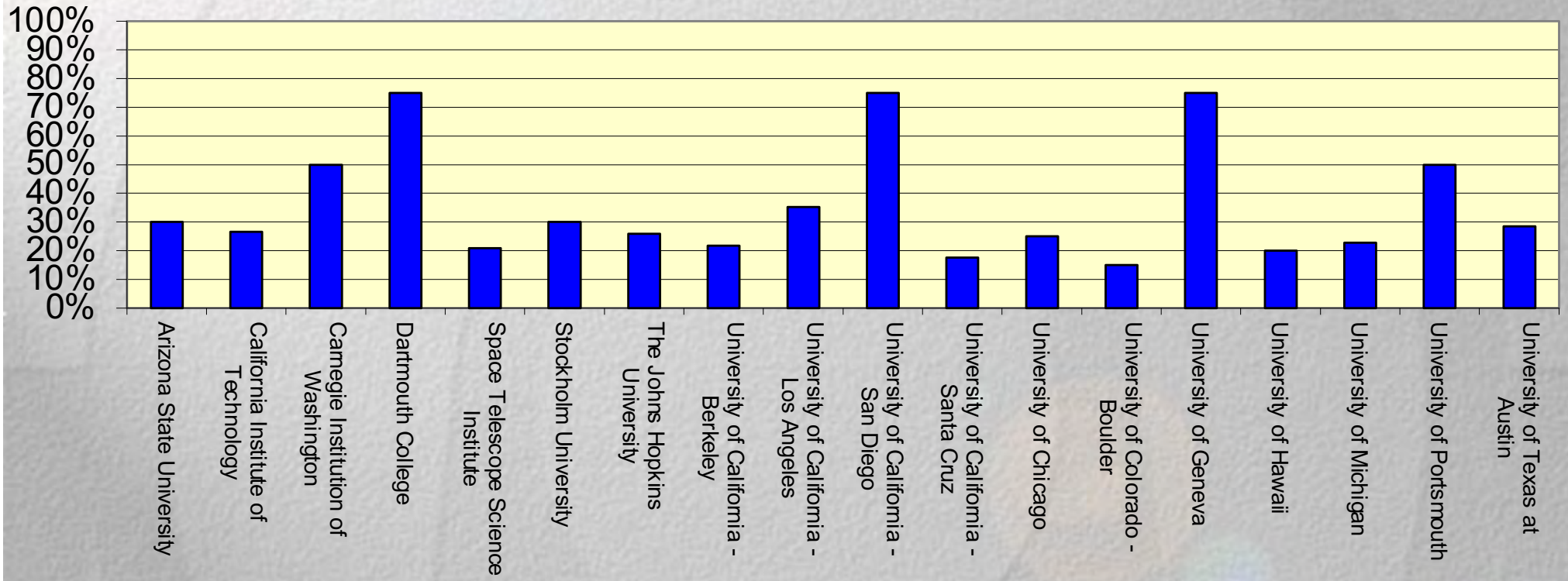
Acceptance Fraction by Size



ESA Acceptance Fraction

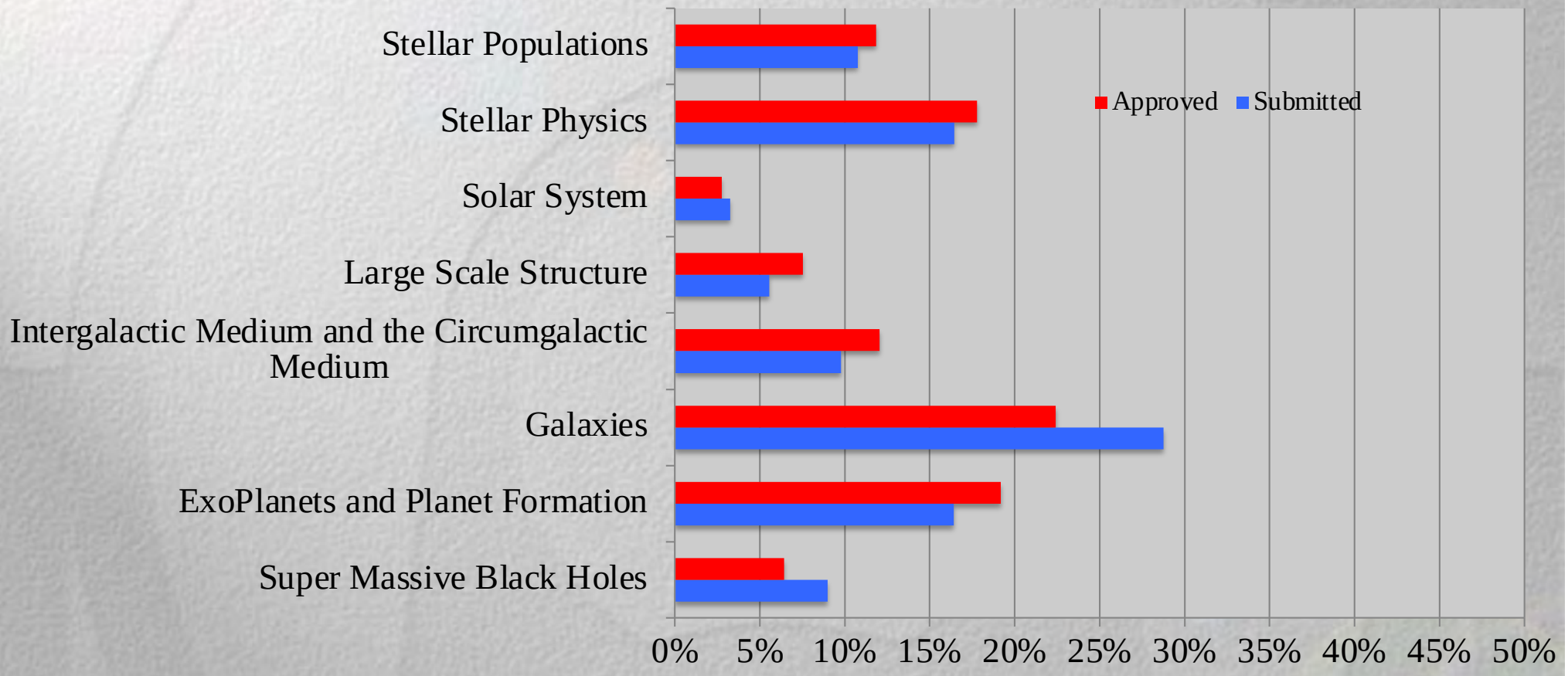


Proposal Institutional Acceptance Fraction

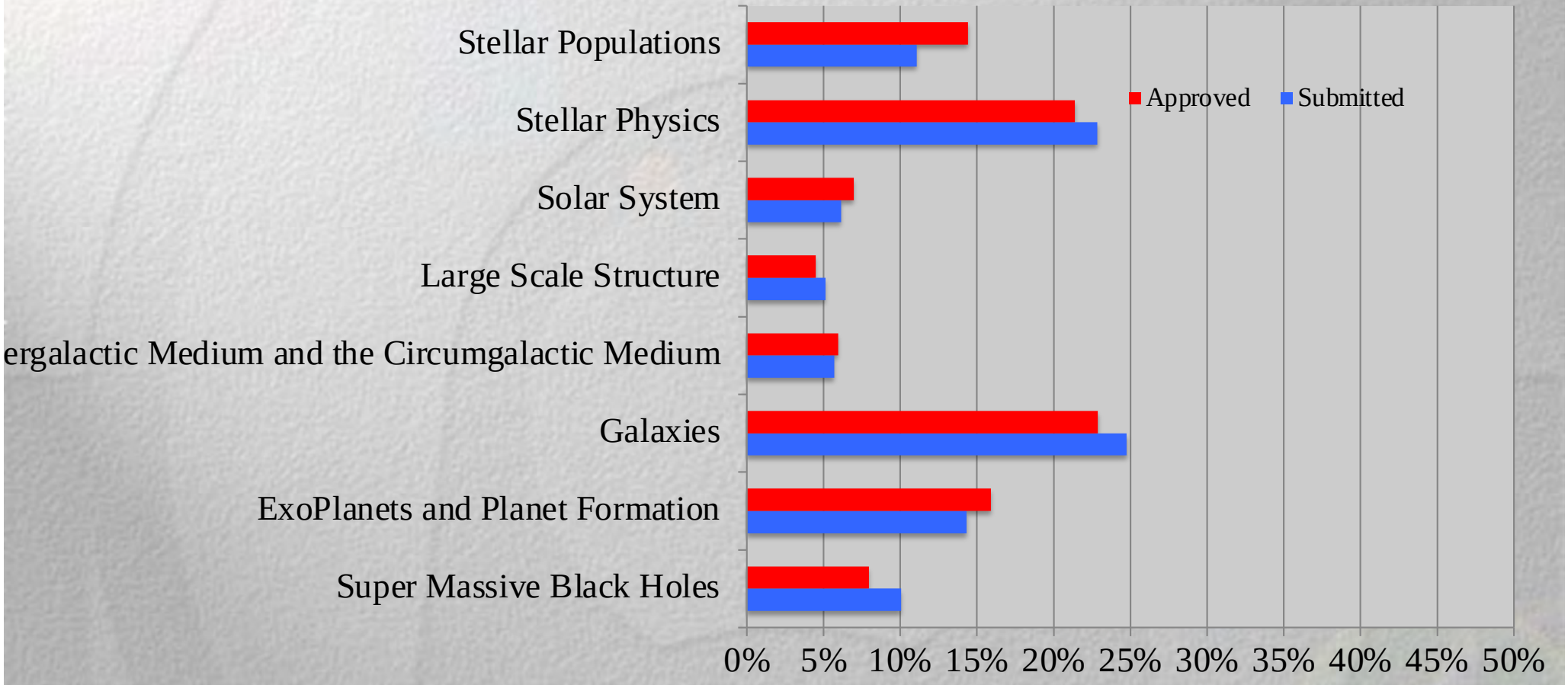


Only shows Institutions that have >=3 Proposals approved

Science Category Distribution by Orbits



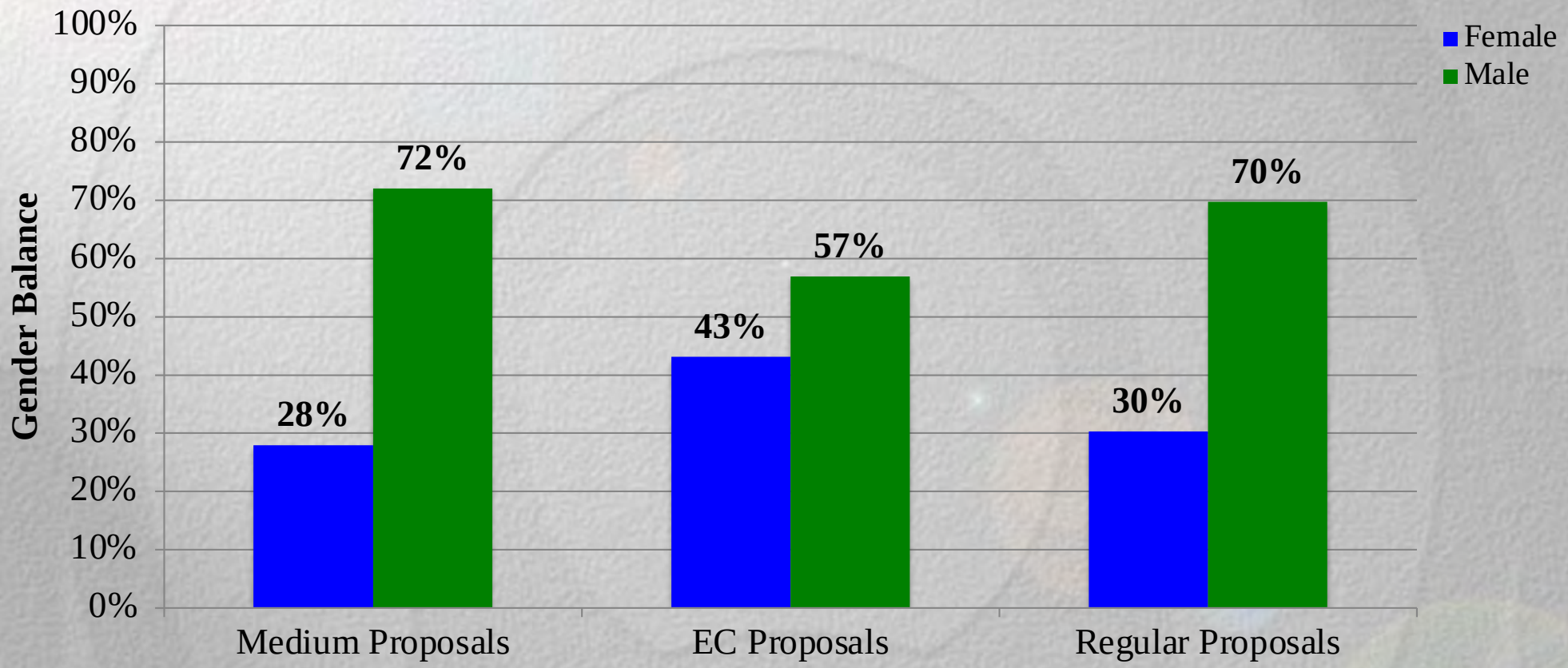
Science Category Distribution by Proposals



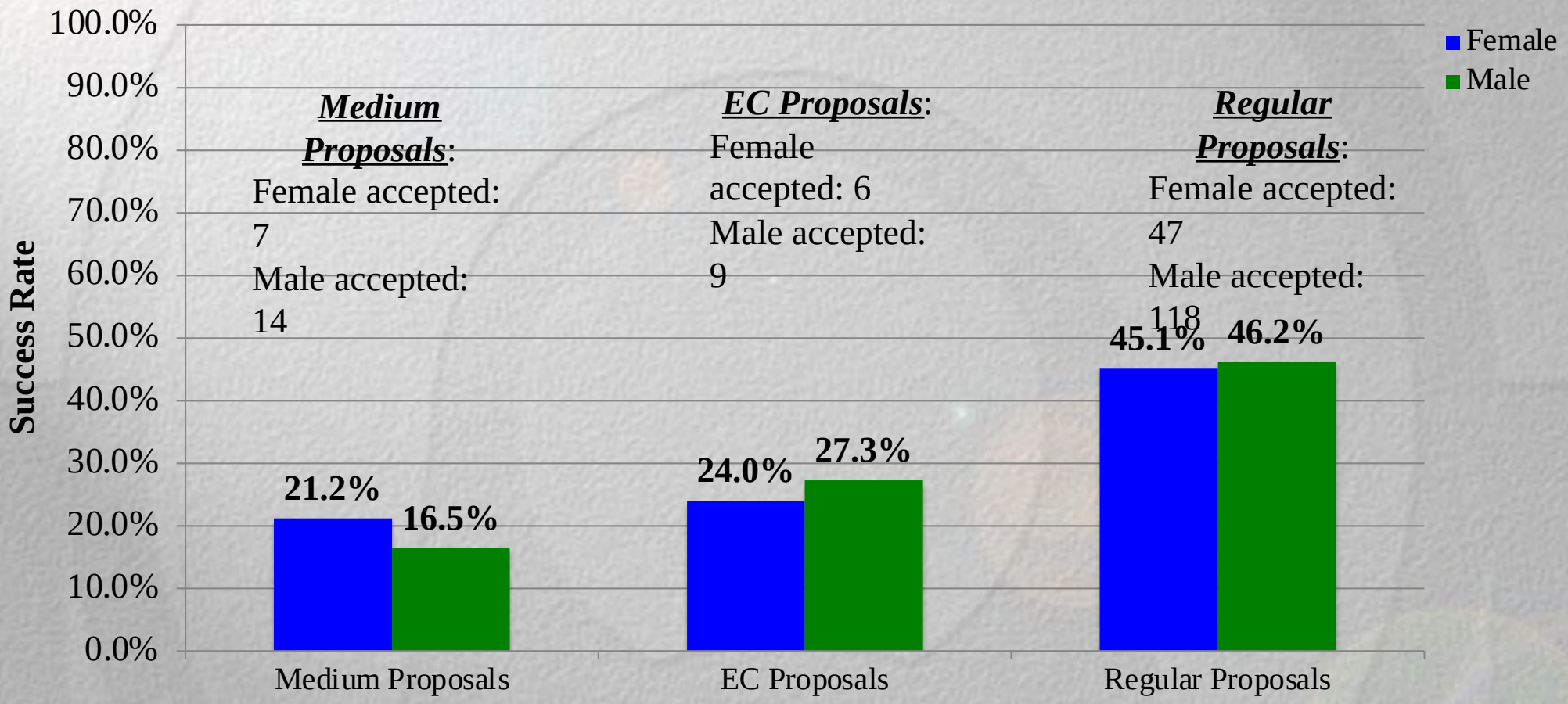
Instrument Summary

Configuration	Mode	Prime %	Coordinated Parallel %	Total	Instrument Prime Usage	Instrument Prime + Coordinated Parallel Usage	Pure Parallel Usage	Snap Usage
ACS/SBC	Imaging	3.3%	0.0%	3.0%			0%	0%
ACS/SBC	Spectroscopy	0.1%	0.0%	0.1%			0%	0%
ACS/WFC	Imaging	9.0%	47.7%	11.5%			0%	13%
ACS/WFC	Ramp Filter	0.0%	0.0%	0.0%	12.5%	14.8%	0%	0%
ACS/WFC	Spectroscopy	0.2%	0.0%	0.2%			0%	0%
COS/FUV	Spectroscopy	16.0%	0.0%	14.9%			0%	0%
COS/NUV	Imaging	0.5%	0.0%	0.5%	18.9%	17.7%	0%	0%
COS/NUV	Spectroscopy	2.5%	0.0%	2.3%			0%	0%
FGS	POS	0.0%	0.0%	0.0%	0.0%	0.0%	0%	0%
FGS	TRANS	0.0%	0.0%	0.0%			0%	0%
STIS/CCD	Imaging	0.7%	0.0%	0.6%			0%	0%
STIS/CCD	Spectroscopy	3.0%	0.0%	2.8%			0%	0%
STIS/FUV	Imaging	0.2%	0.0%	0.2%	14.0%	13.1%	0%	0%
STIS/FUV	Spectroscopy	5.5%	0.0%	5.2%			0%	0%
STIS/NUV	Imaging	0.0%	0.0%	0.0%			0%	0%
STIS/NUV	Spectroscopy	4.7%	0.0%	4.4%			0%	0%
WFC3/IR	Imaging	14.8%	6.7%	14.3%			0%	41%
WFC3/IR	Spectroscopy	3.8%	0.0%	3.5%	54.5%	54.3%	0%	0%
WFC3/UVIS	Imaging	33.5%	45.6%	34.3%			100%	47%
WFC3/UVIS	Spectroscopy	2.4%	0.0%	2.2%			0%	0%

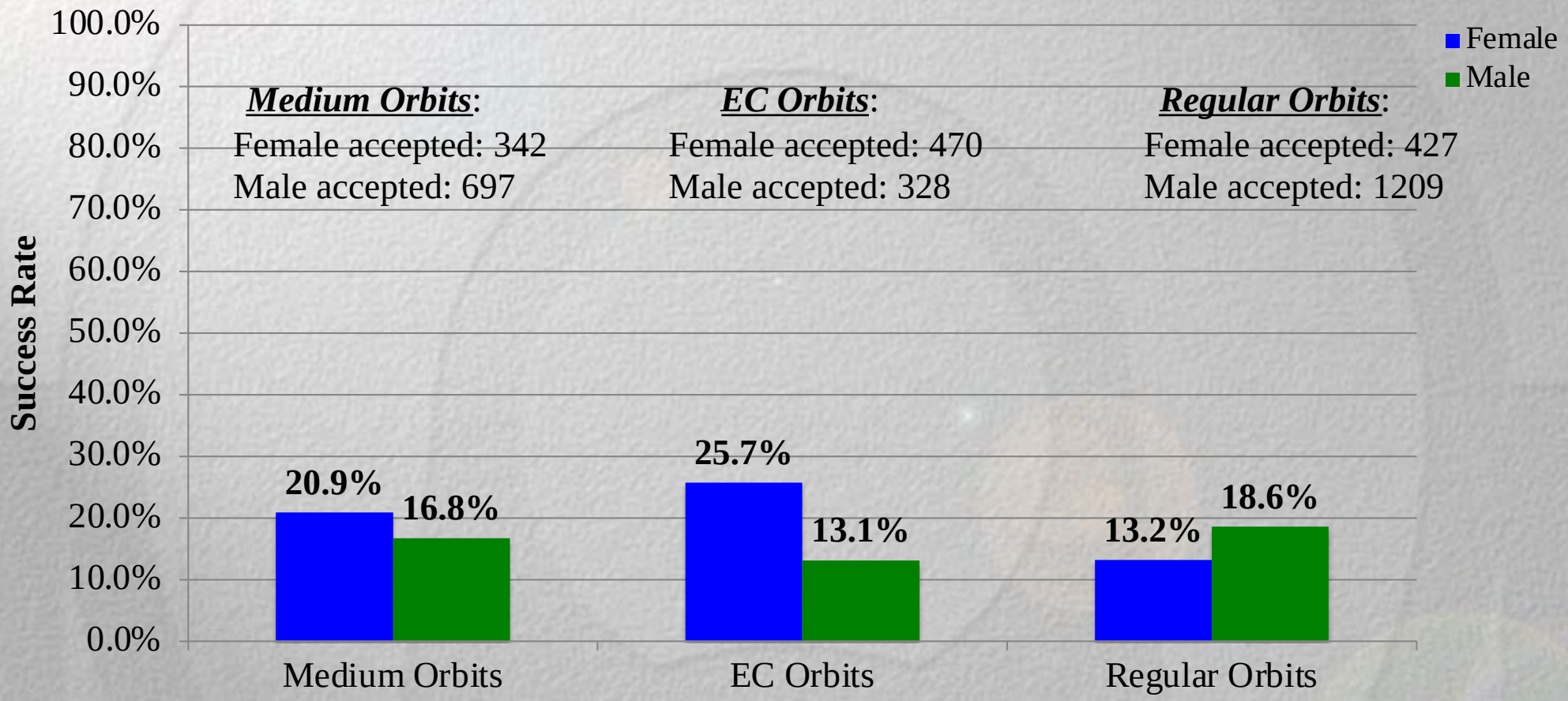
Gender Submission Statistics



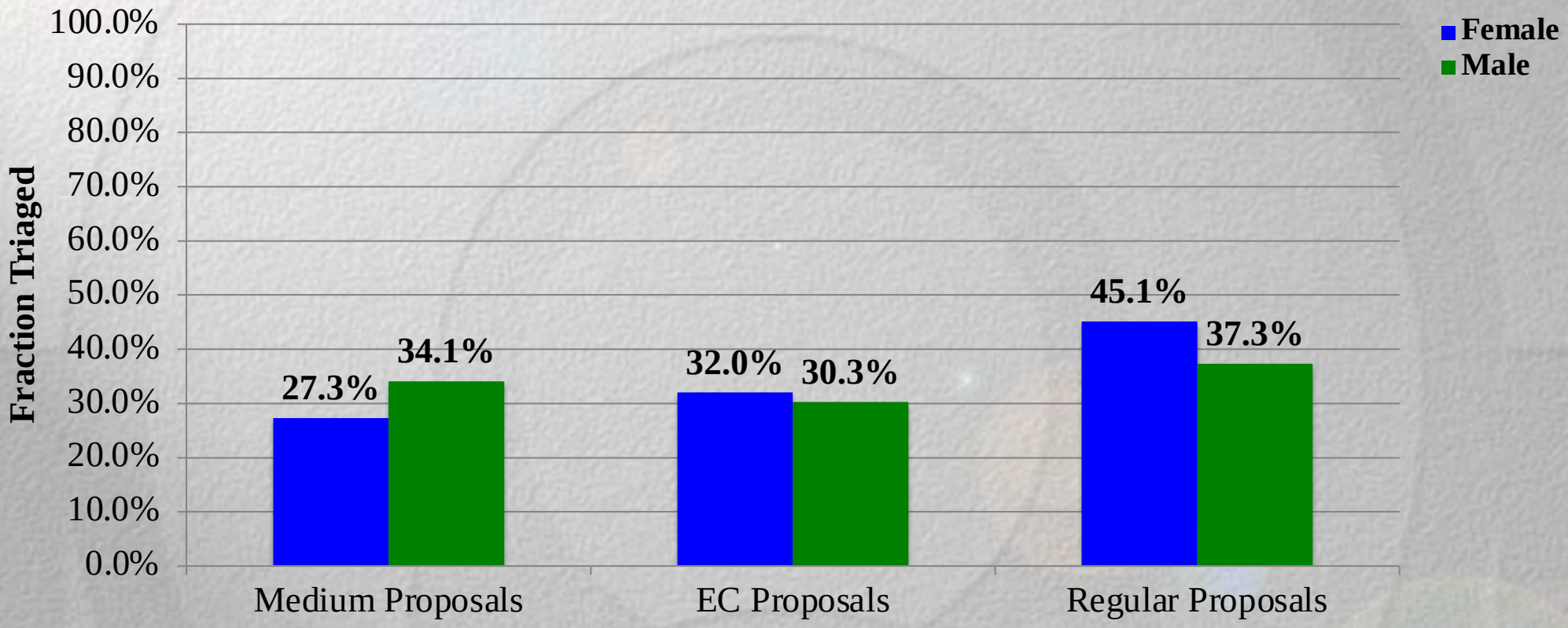
Gender Success Rate by Proposals



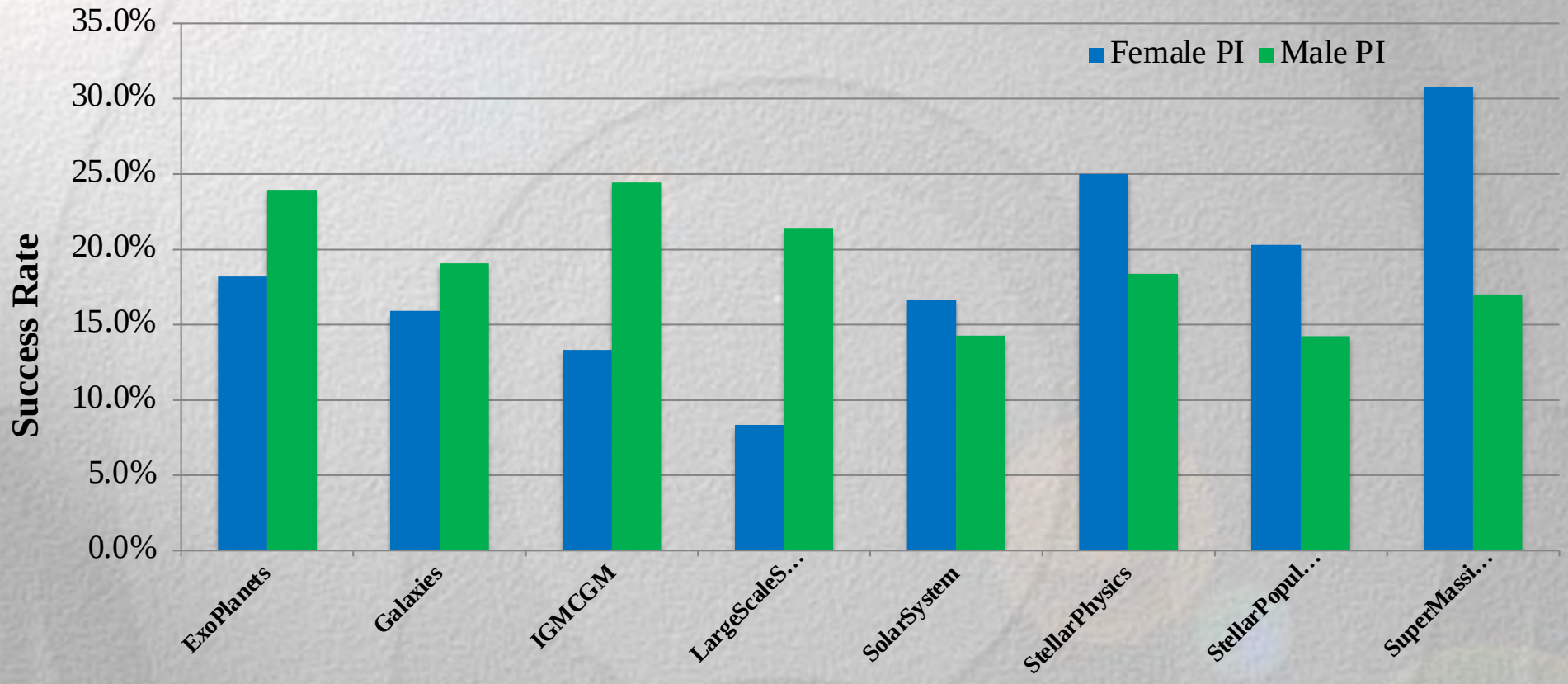
Gender Success Rate by Orbits



Triage Gender Distribution



Gender Success by Science Category



Cycle 31 Preparations

- Cycle 31 will start on **12/1/23** and end on **9/30/24**
- The Cycle 31 HST TAC will have the same hybrid structure as the Cycle 30 TAC, with external panelists reviewing Small (< 16 orbits), SNAP and AR proposals.
- All Small and SNAP proposals in CGM/IGM and LSS will be in the virtual panel.
- All other proposals will be exclusively reviewed by virtual panels.
- The reviews will again be dual-anonymous.
- All five instruments will be offered (if operational): ACS, COS, FGS, STIS, WFC3.
- The same proposal categories as in C30 will be offered.

Cycle 31 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, Circumstellar Matter)
- *Stellar Populations Panel* (Resolved Stellar Populations, ISM)
- *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 Panel* (AGN/Quasars)
- *Large-Scale Structure of the Universe Panel* (Cosmology, Galaxy Clusters, Lensing, Distance Scale)

Cycle 31 Plans (cont.)

- The TAC Chair is **Rupali Chandar** (Univ. of Toledo)
- The selection of the Panel Chairs and Vice-Chairs, and the panelists will commence in November.
- Each panel will have 11 – 15 Panelists and a Chair and Vice-Chair. Solar system will not have a Vice-Chair. The panels will meet virtually.
- The Panel Chairs and Vice-Chairs and three At-Large members will form the Executive Committee.
- **The Executive Committee will meet in-person**.

Available Orbits in Cycle 31

- Roughly **2300** orbits available for Cycle 31 GOs. The Cycle 30 allocation was 3000.
- Provisional break-down:
  - **500** orbits for the TAC (**Large** and **Treasury**)
  - **1200** orbits for the 8 Panels (**Small** GO with <35 orbits)
  - **600** orbits will be allocated for **Medium** proposals (35 – 74 orbits)
  - An additional 1000 Snapshot observations and 400 Pure-Parallel observations may be allocated.
  - Distribution may be adjusted based on proposal pressure.

Tentative Cycle 31 Proposal Review Schedule

- *03/01/23*: Call for Proposals release
- *05/24/23*: Phase I Proposal deadline
- *06/07/23*: Proposals made available to panels
- *07/14/23*: Grades and reviews due from panelists
- *07/19/23*: Triage results available to panels
- *08/02/23 – 08/09/23*: Panels and EC meet
- *08/18/23*: Notifications sent out
- *09/14/23*: Phase 2 proposal deadline
- *10/04/23*: Budget submission deadline

Backup: Details on the C30 Results

UV Initiative

- Target was 40% for panels and 50% for EC
- Overall 49% for UV Proposals and 68% for orbits recommended
  - ⇒97% of EC are UV Orbits
    - ⊃(total orbit request not all UV)
  - ⇒2360 of 3473 Orbits Recommended
  - ⇒12 of 38 ARs; 86 of 155 GOs

Target of Opportunity Proposals

ID	Orbits	Disruptive Activations	Non-Disruptive Activations	Total Activations	Multi-Cycle	Type of ToO
2882	6	1		1		COS/STIS spectra of TDE
3535	6	1		1		STIS spectra of either Type Ibn or Type Icn SN
3578	18	1		1		WFC3 imaging+grism of kilonova
3011	12	1		1	yes	Imaging and spectra of multiply-imaged supernova
2863	4	1		1		WFC3 imaging of next interstellar interloper
3306	12	1		1		WFC3 imaging and grism of short GRB
2965	22	1		1		STIS/CCD spectra of a supernova
3744	8	1		1		STIS spectra of single Type IIP SN
3506	8		4	4		STIS spectra of four Type Ia SNe
3519	18		1	1		UV spectra of Mrk 817 spectral change
3771	16		1	1		COS and STIS spectra of next interstellar interloper
3137	105+30		100	100	yes	WFC3 imaging of Type Ia SNe
	265*	8	106	114		* Orbits are Total per proposal not ToO Orbits

Chandra Coordinated Proposals

- 9 GO Proposals were submitted for 145 HST Orbits and 910 Ksecs of Chandra time.

  ⇒2 recommended for 19 HST Orbits and 240 ksecs of Chandra time

ID	Orbits	Ksecs	Title
3221	6	80	WD Periastron Passage in the R Aqr System: Zooming on the New Ejecta and Jet
3456	13	160	Determining the High-Energy Emission Mechanism in Extragalactic Jets with HST

XMM-Newton Coordinated Proposals

- 13 GO Proposals were submitted for 151 HST Orbits and 971 Ksecs of XMM-Newton time
  - ⇒1 recommended for 18 HST Orbits and 30 Ksecs of XMM-Newton time

ID	Orbits	Ksecs	Title
3578	18	30	Compact binary mergers: R-process kilonovae and ultra-relativistic jets

NOIRLab Coordinated Proposals

- 8 GO Proposals were submitted for 172 HST Orbits and 19 NOIRLab Nights
  - ⇒0 recommended

NRAO Coordinated Proposals

- 7 GO Proposals were submitted for 203 HST Orbits and 147 NRAO Hours
  - ⇒2 recommended for 102 HST orbits and 61 NRAO hours

ID	Orbits	Hours	Title
3221	6	16	WD Periastron Passage in the R Aqr System: Zooming on the New Ejecta and Jet
3505	96	45	The Circumgalactic Medium of Dwarf Galaxy Pairs

TESS Coordinated Proposals

- 5 GO Proposals were submitted for 226 HST Orbits
  - ⇒1 recommended for 116 orbits

ID	Orbits	Title
3366	116	The SPACE Program: a Sub-neptune Planetary Atmosphere Characterization Experiment