STScI | SPACE TELESCOPE SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWST Cycle 2 Peer Review Results

Revised Summary from the Science Mission Office
of the TAC Recommendations to the STScI Director
Presented May 05, 2023

Review Agenda

- Executive Summary of Review Recommendations
- Recommended Executive Committee and Medium Proposals
- Summary Statistics and Charts
- Cycle 2 Resource Recommendations
- Investigator Demographics
- TAC Process Summary

Submissions

- The JWST Cycle 2 GO/AR deadline was on January 27 2023
  - A total of 1601 submissions were received by this date
  - 8 Proposals found to be non-compliant and are excluded from these statistics (slide 33)
- The 1593 Reviewed proposals include
  - 527 proposal led by ESA PIs (33.1%)
  - 54 proposals led by Canadian PIs (3.4%)
  - 17918 Co-investigators in total
  - 5450 Unique investigators (PI, co-PI & co-I)
- Representation from
  - 52 Countries
  - 46 US states + DC, Puerto Rico and the Virgin Islands

See this link for more information on proposal submissions: https://jwst-docs.stsci.edu/files/187220539/187220705/2/1677076900742/Cycle2SubmissionStatistics.pdf

Executive Summary

Executive Summary

- Acceptance Rate
  - GO 1 in 6.5 for proposals and 1 in 7.3 for Hours
    - Small: 48% of time – 1 in 7
    - Medium: 35% of time – 1 in 7.4
    - Large: 17% of time - 1 in 7.4
  - Survey 7 for 832 targets recommended 1 in 4.4 for proposals and 1 in 4.9 for targets
  - Archival Research 16/101 = 1 in 6.31
    - Regular 8 recommended
    - Theory 8 recommended
    - Legacy 0 recommended
- Instruments: MIRI 29.6%, NIRCam 19.9%, NIRISS 4.1%, NIRSPEC 46.4%
  - Imaging 23.4% vs Spectroscopy 76.6%
- Student led PIs 10.4% (26); (Cycle 1 8.7% for 25 proposals)
- 49% of PIs are 1st time HST or JWST PIs (115 of 235 unique)

Executive Summary

- CSA Acceptance
  - PIs 4.7% for proposals and 4.3 % hours of total observing program
  - CSA Submitted vs Accepted is
    - 21% for proposals 11 out of 53
    - 18% for hours 214 out of 1174
  - CoIs are 3.5% of the total CoIs
- ESA Acceptance
  - PIs for proposals 32.6% and 38.5% for hours of total observing program
  - ESA Submitted vs Accepted is
    - 15% for proposals 76 out of 518
    - 16% for hours 1917 out of 12099
  - CoIs are 40.4% of the total CoIs
- Recommend Awarding ~$2.4M to Archival Research Programs
  - Regular AR – $1.2M
  - Theory – $1.2M
  - Legacy – 0

    - Estimates based on $150K for Regular/Theory and $400K for Legacy

Executive Summary

- Proposal acceptance fraction 20% for panelists
- Proposal acceptance fraction 12% for STScI staff
- Medium Proposals
  - 38 out of 275 recommended for 1764 Hours
  - 93 were triaged
- Calibration Proposals
  - 5 recommended for 60.2 Hours
- ToO Activations
  - 1 ≤ 14 days (1 UltraRapid) and 7 > 14 days
- Pure Parallels
  - 2 recommended for 1215 Hours
- Cloud Computing
  - 0 recommended (0 Submitted)
- Data Science Software
  - 0 recommended
- Zero exclusive access period
  - ~1654 hours of GO programs (33% of the Program)

Executive Summary

- Joint ALMA: 2 for 6.24 Hours *(8 for 34 hours submitted)*
- Joint CHANDRA: 1 for 75 Kseconds *(3 for 241 ksecs submitted)*
- Joint HST: 2 for 8 Orbits Recommended *(24 for 220 orbits submitted)*
- Joint KECK: 0 recommended *(5 for 8 nights submitted)*
- Joint NOIRLab: 0 recommended *(1 for 3 nights submitted)*
- Joint XMM: 0 recommended *(3 for 105 ksecs submitted)*
- The 249 Recommended proposals include (Full Demographics in Backup Slides)
    - 249 PIs, 3432 CoIs, and 123 CoPIs
    - 2078 Unique investigators (PI, co-PI & co-I)
    - Representation from
        - 41 Countries
        - 14 ESA Countries
        - 6 Canadian Provinces and Territories
        - 36 US states + DC and the Virgin Islands

Summary Results

Proposals	Requested	Approved	% Accepted	CSA Accepted	CSA % Total	ESA Accepted	ESA % Total
General Observer	1461	226	15%	10	4%	75	33%
Survey	31	7	23%	1	0%	1	14%
Regular AR	54	8	15%	0	0%	0	0%
AR Legacy	5	0	0%	0	0%	0	0%
Theory	42	8	19%	0	0%	0	0%
Total	***1593***	***249***	***16%***	***11***	***5%***	***76***	***32%***
Primary Hours	**36350**	**4983 ***	**14%**	**214**	**4%**	**1917.11**	**38%**

- CSA & ESA Hours/Proposals are for GO/Survey only
- * +60.2 Hours are from Calibration Pool

Recommended Executive Committee Proposals

Recommended Programs from the Executive Committee

ID	Resources	Science Category	Title
03215	135.46 + 103 CPar	Galaxies	Unveiling the Redshift Frontier with JWST
04098	82	Exoplanets and Exoplanet Formation	Exploring the existence and diversity of volatile-rich water worlds
03368	97.72	Galaxies	A JWST Survey of Ultraluminous Infrared Galaxies
03293	147.82	Galaxies	JWST's GLIMPSE: gravitational lensing & NIRCam imaging to probe early galaxy formation and sources of reionization
03730	115.11	Exoplanets and Exoplanet Formation	The Hot Rocks Survey: Testing 9 Irradiated Terrestrial Exoplanets for Atmospheres
03171	132.39	Exoplanets and Exoplanet Formation	Red Dwarfs and the Seven Giants: First Insights into the Atmospheres of Giant Exoplanets around M-dwarf Stars
03383	615 PPAR	Galaxies	JWST Wide Area 3D Parallel Survey
03990	600 PPAR	Galaxies	A NIRCam Pure-Parallel Imaging Survey of Galaxies Across the Universe
03435	61.91	Galaxies	The JWST Whirlpool Galaxy Treasury
03707	148.84	Galaxies	A JWST Census of the Local Galaxy Population: Anchoring the Physics of the Matter Cycle
03964	219 Targets	Stellar Physics and Stellar Types	The MIRI Excess Around Degenerates Survey
04204	212 Targets	Supermassive Black Holes and Active Galaxies	A census of high-redshift kpc-scale dual quasars

12 Programs recommended for 921 Hours (* See Issue Slide #3)

Recommended Medium Proposals

Recommended ExoPlanet Medium Programs from the Panels

ID	Hours	Title
02950	34.38	Exploring sulfur dioxide in H/He-rich hot gas giant atmospheres
03034	64.48	Building on ALMA: a JWST legacy survey of the chemical evolution of planet-forming disks
03077	71.57	TRAPPIST-1 Planets: Atmospheres Or Not?
03228	39.5	The volatile inventory of the terrestrial planet forming zone: a study of transport from the outer to the inner disk with JWST and ALMA
03385	29.81	The first comparative atmospheric study of a Jovian planet and a sub-Neptune in the TOI-1130 system
03557	67.35	A JWST Search for Missing Methane
03838	49.21	Does atmospheric composition actually trace formation? Observing aligned vs misaligned hot Jupiters as a testbed
03860	44.23	Phase Curve Observations of TOI-561 b To Study Atmosphere-Interior Exchange
03886	41.54	Probing carbon chemistry and dust in the planet-forming zones of brown dwarf disks
03969	61.53	Hot Jupiter Atmospheric Forecast: are mornings cloudier than evenings in other worlds?
03983	26.71	Searching for Evidence of EUV Photoevaporation in Actively Dispersing Protoplanetary Disks
04050	45.73	Uncharted Worlds: Towards a Legacy of Direct Imaging of Sub-Jupiter Mass Exoplanets
04290	28.4	Dust Settling and Grain Evolution across the Nearby Population of Edge-on Protoplanetary Disks

13 Programs recommended for 604 Hours

Recommended Galaxies Medium Programs from the Panels

ID	Hours	Title
02883	38.73	MAGNIF: Medium-band Astrophysics with the Grism of NIRCam in Frontier Fields
03045	56.93	Witnessing the Maturing of Teenage Galaxies at z = 4 – 6 with a Comprehensive UV - Optical - Sub-mm Benchmark Sample for the Community
03290	48.5	A complete spectroscopic census of the faintest galaxies and AGN at the dawn of galaxy formation
03362	44.03	JWST in Technicolor: Finding and Mapping the Most Extreme Star Forming Galaxies in the Epoch of Reionization with Medium and Narrow Bands
03426	28.01	Confirming the population of disk galaxies at z>3
03433	38.16	Mapping star formation and feedback in clumpy galaxies at redshift ~5
03516	47.13	All the Little Things: Pop III Signatures & the Ionizing Photon Budget of Dwarf Galaxies in the Epoch of Reionization
03538	64.14	Unveiling the properties of high-redshift low/intermediate-mass galaxies in Lensing fields with NIRCam Wide Field Slitless Spectroscopy
03543	72.58	Old Galaxies in the young Universe: ultra-deep continuum spectroscopy before cosmic noon
03567	47.06	A deep dive into the physics of the first massive quiescent galaxies in the Universe
03743	40.78	You (Don't?) Spin Me Round: Resolving Disk Formation in High-Redshift Dusty Starburst Galaxies
04111	48.02	Medium bands, Mega Science: spatially-resolved R~15 spectrophotometry of 50,000 sources at z=0.3-12
04125	67.64	Galaxies Under Construction: Resolved Scaling Relations and Stellar Mass Assembly as Revealed by Lensed Star-Forming Clumps at Cosmic Noon
04233	57.89	A complete census of the rare, extreme and red: a NIRCam-selected extragalactic community survey with JWST/NIRSpec

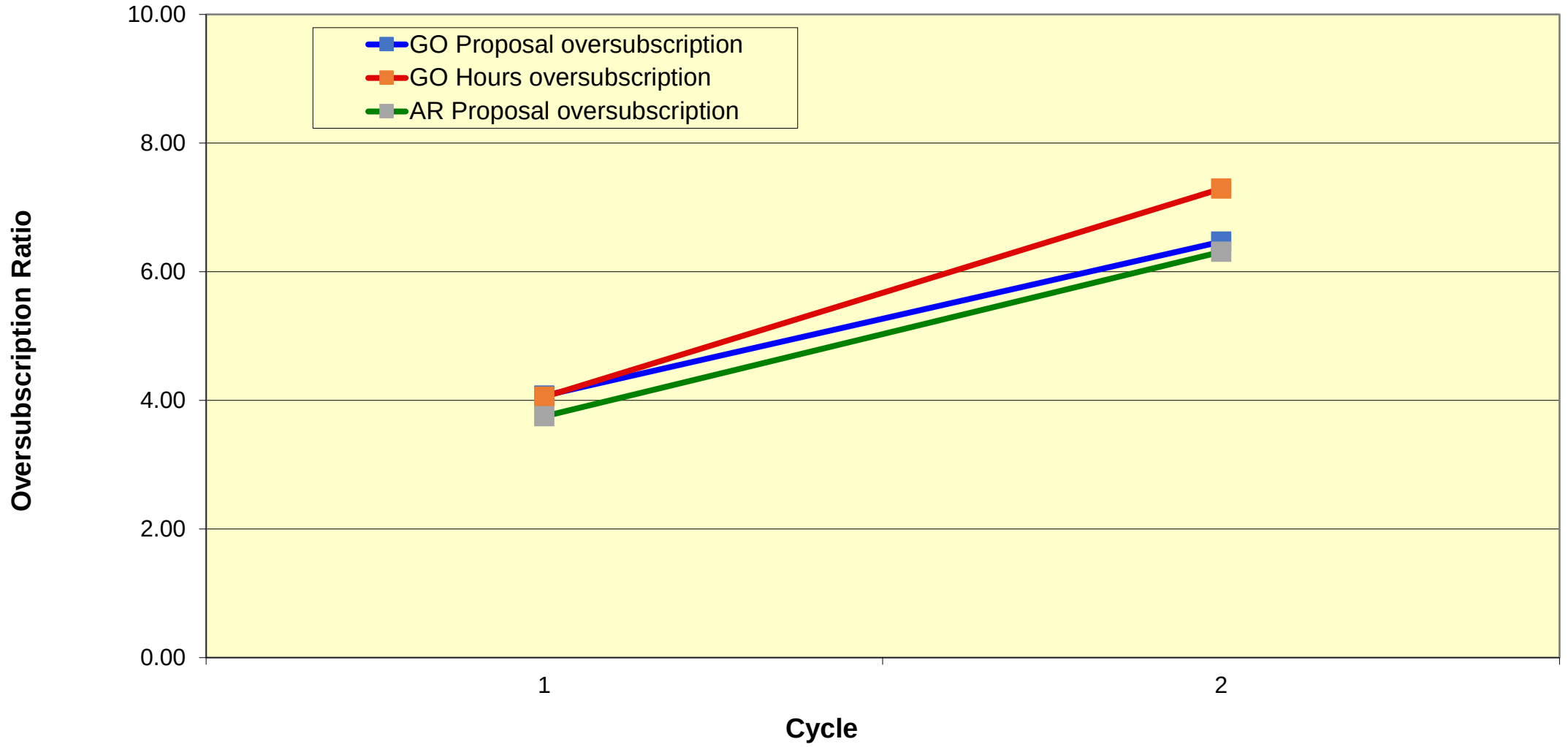
14 Programs recommended for 700 Hours

Recommended Medium Programs from the Panels

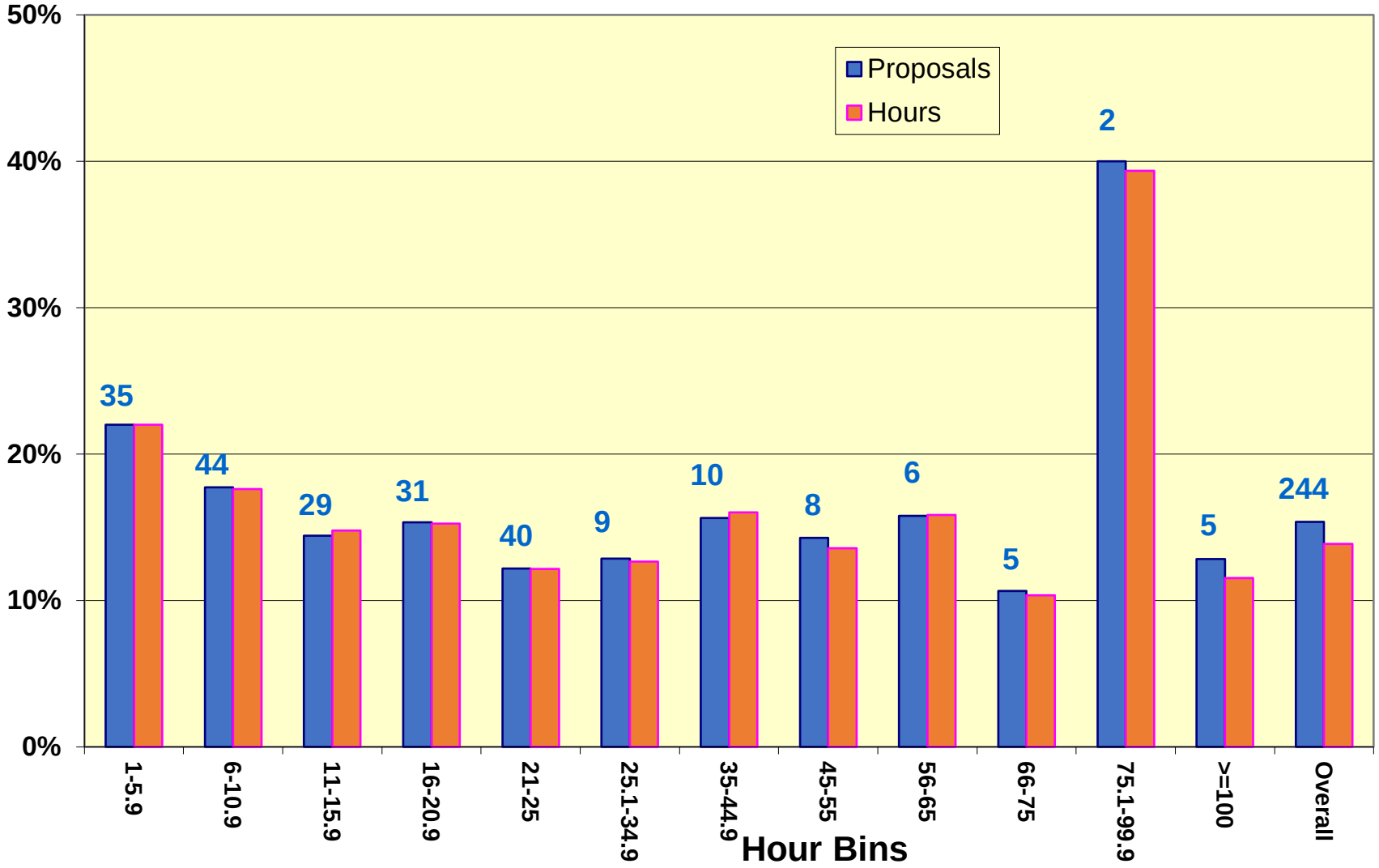
ID	Hours	Science Category	Title
03055	46.83	Large Scale Structure of the Universe	A TRGB calibration of Surface Brightness Fluctuations
03325	44.51	Large Scale Structure of the Universe	Mapping the Most Extreme Protoclusters in the Epoch of Reionization
	91.34		
03991	**26.25**	Solar System Astronomy	Small Cold Classical TNOs as Witnesses of Outer Nebular Chemistry
03225	66.99	Stellar Physics and Stellar Types	What are the real mass loss rates of massive stars?
03779	29.75	Stellar Physics and Stellar Types	The MIRI MRS Library
	96.74		
02957	46.28	Stellar Populations and the Interstellar Medium	The search for Population III stars in low-metallicity 7<z<9.5 galaxies
03849	42.43	Stellar Populations and the Interstellar Medium	A Pristine IMF Probe of the Star-Forming Conditions in the Early Universe
	88.71		
03257	25.95	Supermassive Black Holes and Active Galaxies	A systematic search for warm molecular gas in AGN and star forming galaxies at z=2 with MIRI
03324	29.88	Supermassive Black Holes and Active Galaxies	Sgr A* as Particle Accelerator: What Drives the Black Hole's Variable IR and X-ray Emission?
03869	39.23	Supermassive Black Holes and Active Galaxies	Extreme Feedback in Action: Fast and Powerful Molecular Outflows in the Local Universe
	95.06		

Summary Statistics and Charts

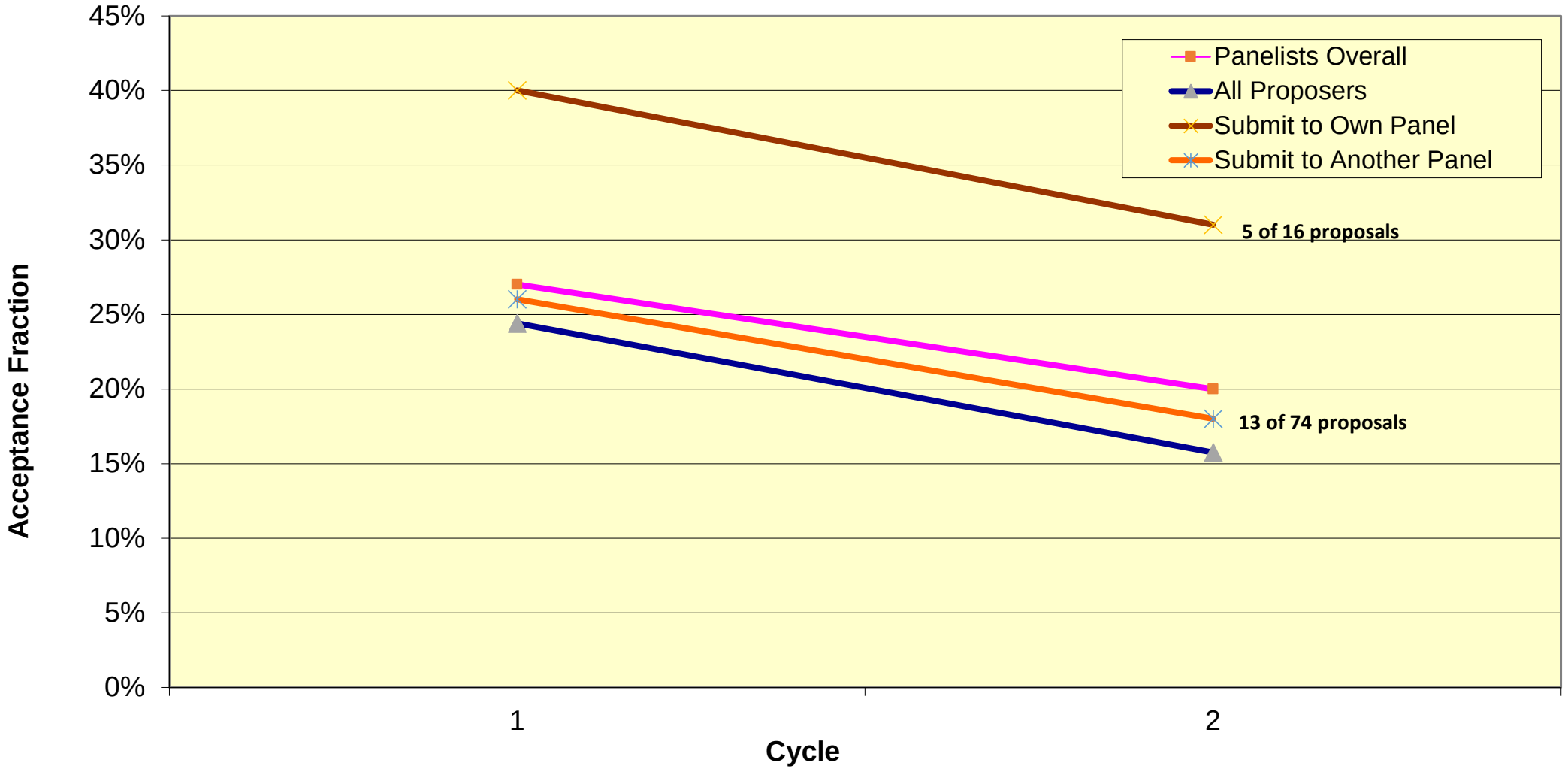
Oversubscription by Cycle



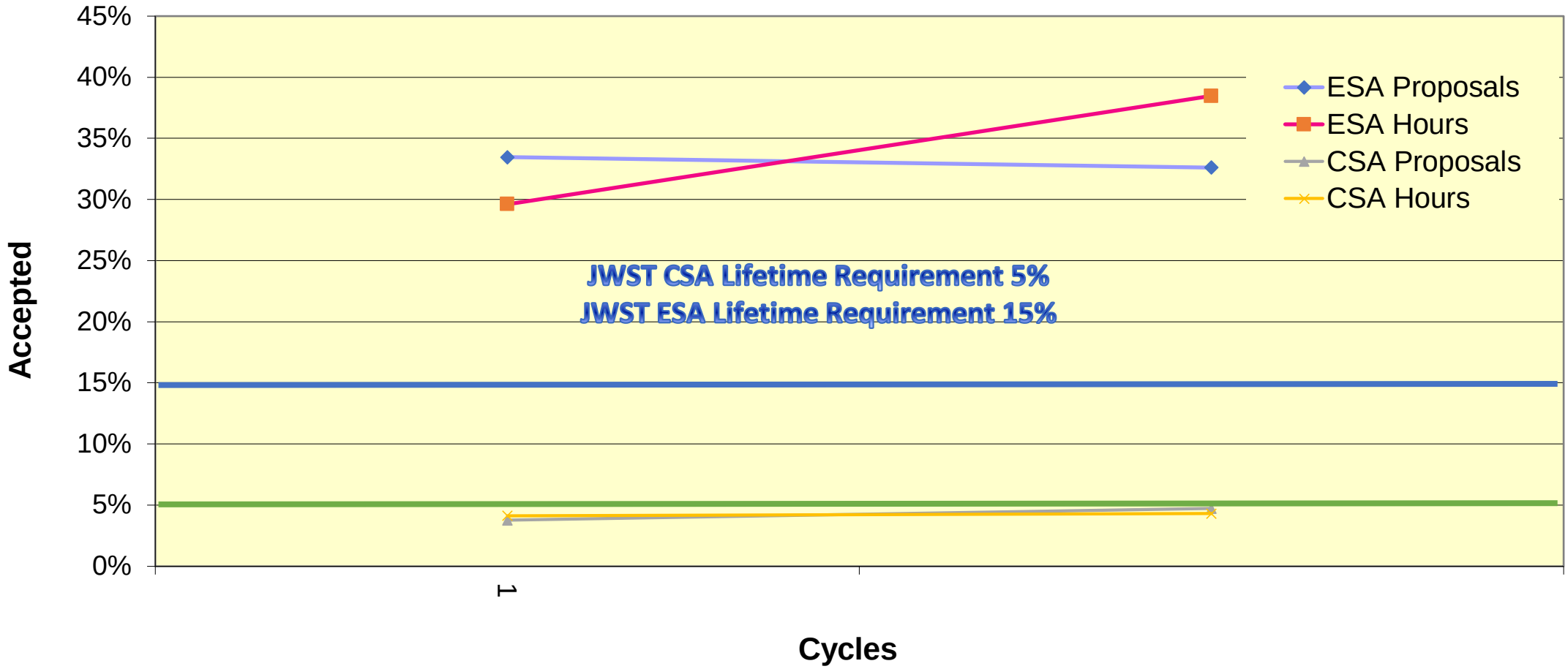
Acceptance Fraction by Size



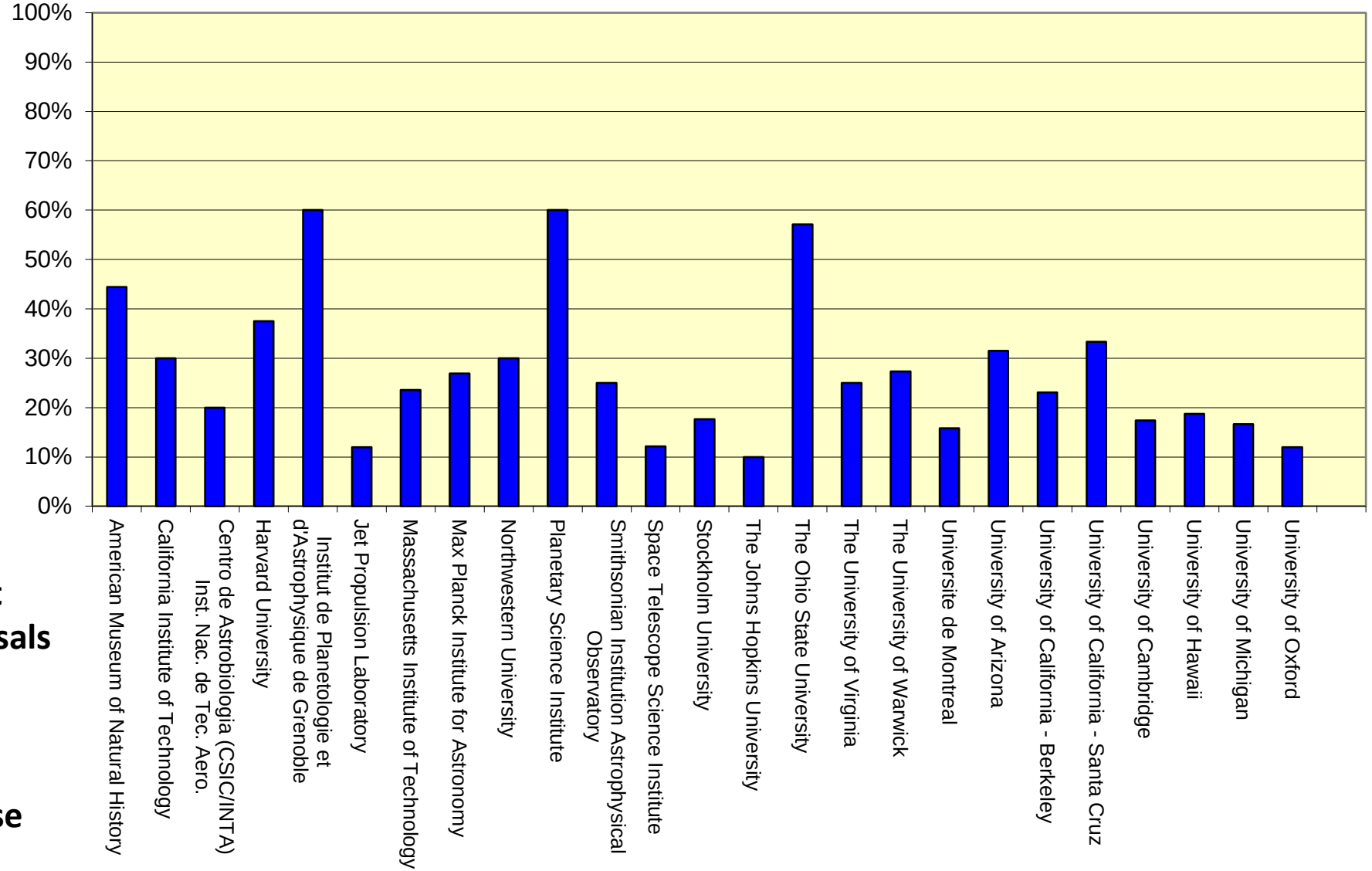
Panelist Acceptance Fraction



CSA and ESA Acceptance Fraction

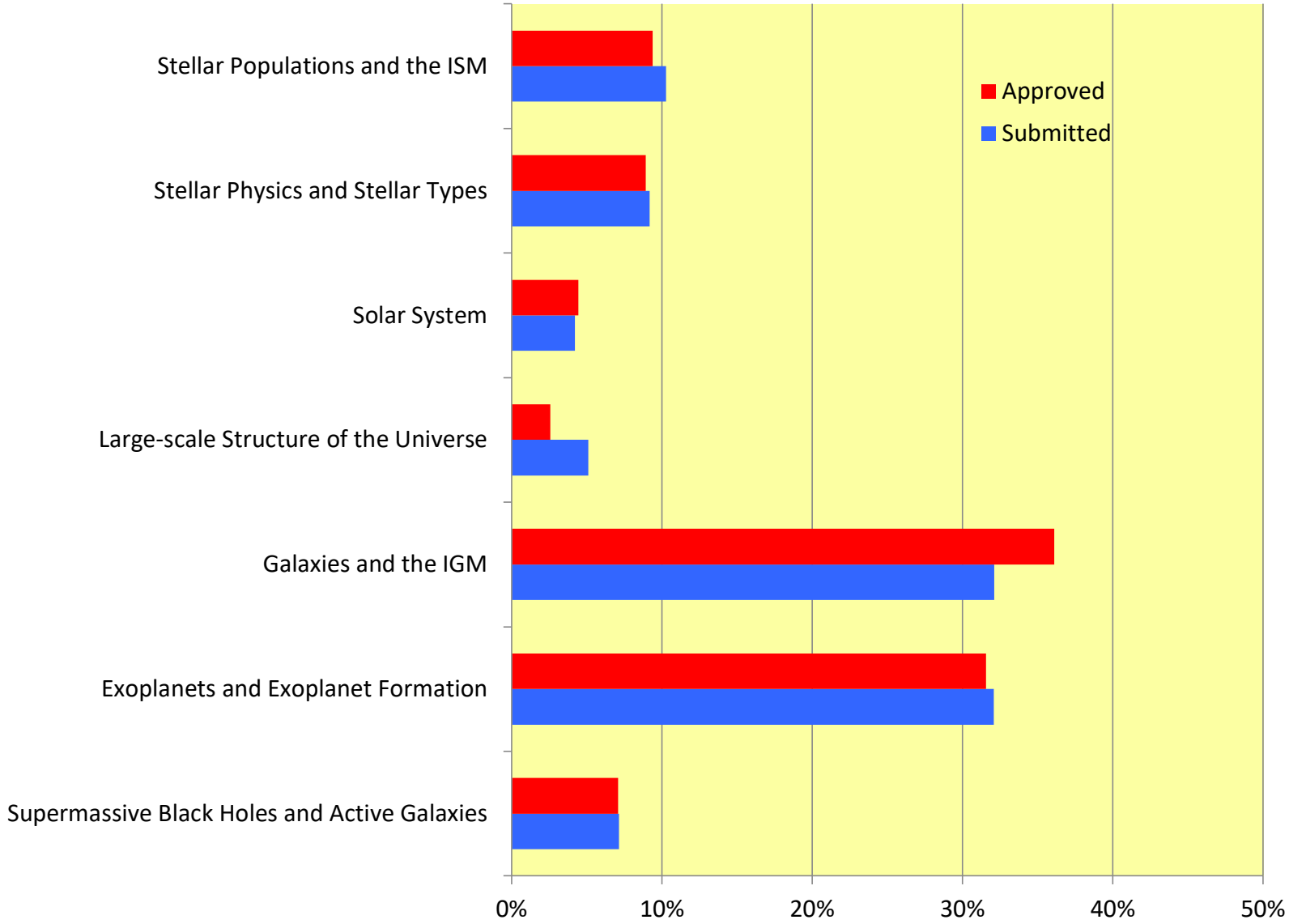


Proposal Institutional Acceptance Fraction

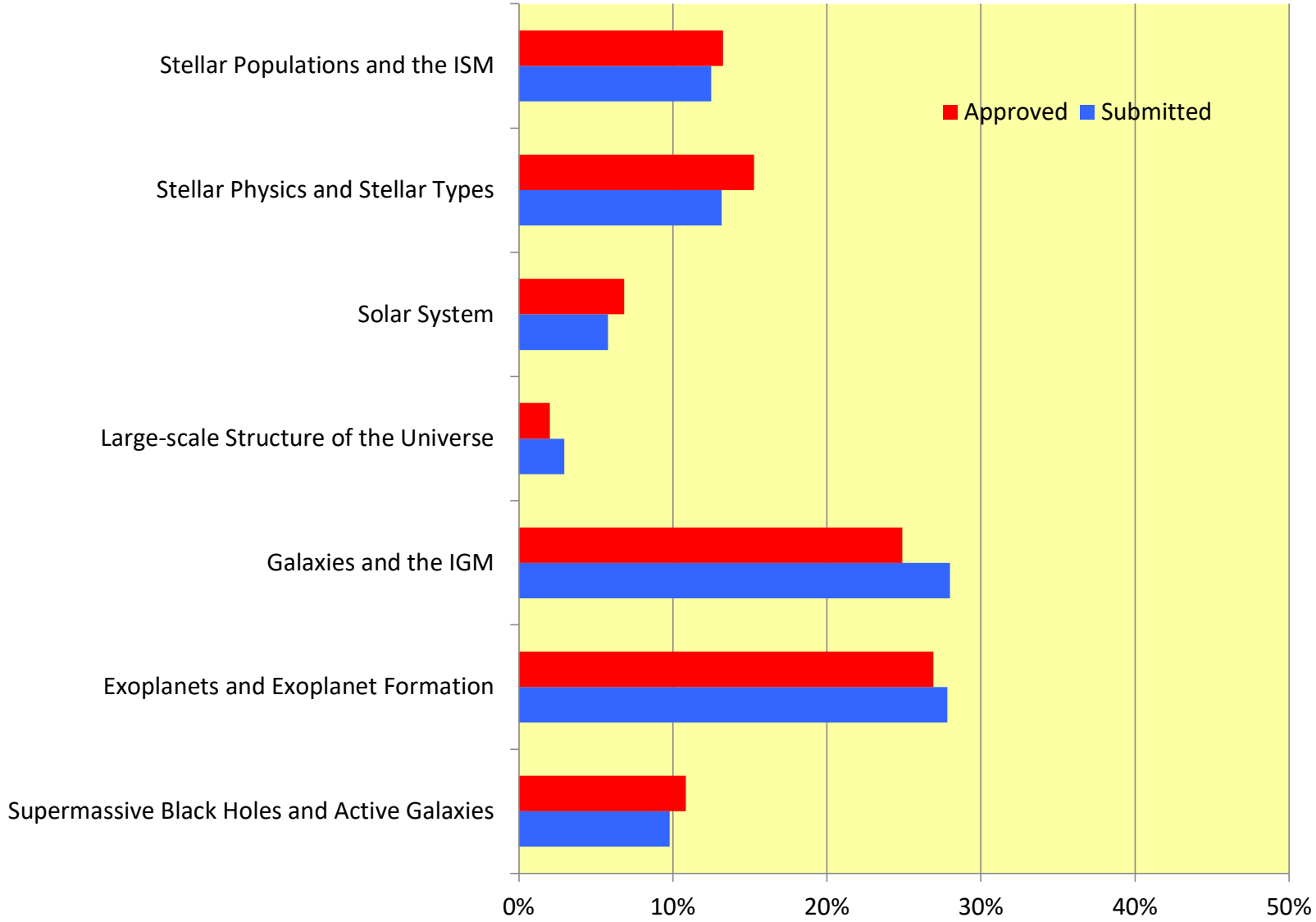


Only shows Institutions that have >=3 Proposals approved
55% of the Recommended Hours from these 26 Institutions

Science Category Distribution for Hours



Science Category Distribution for Proposals

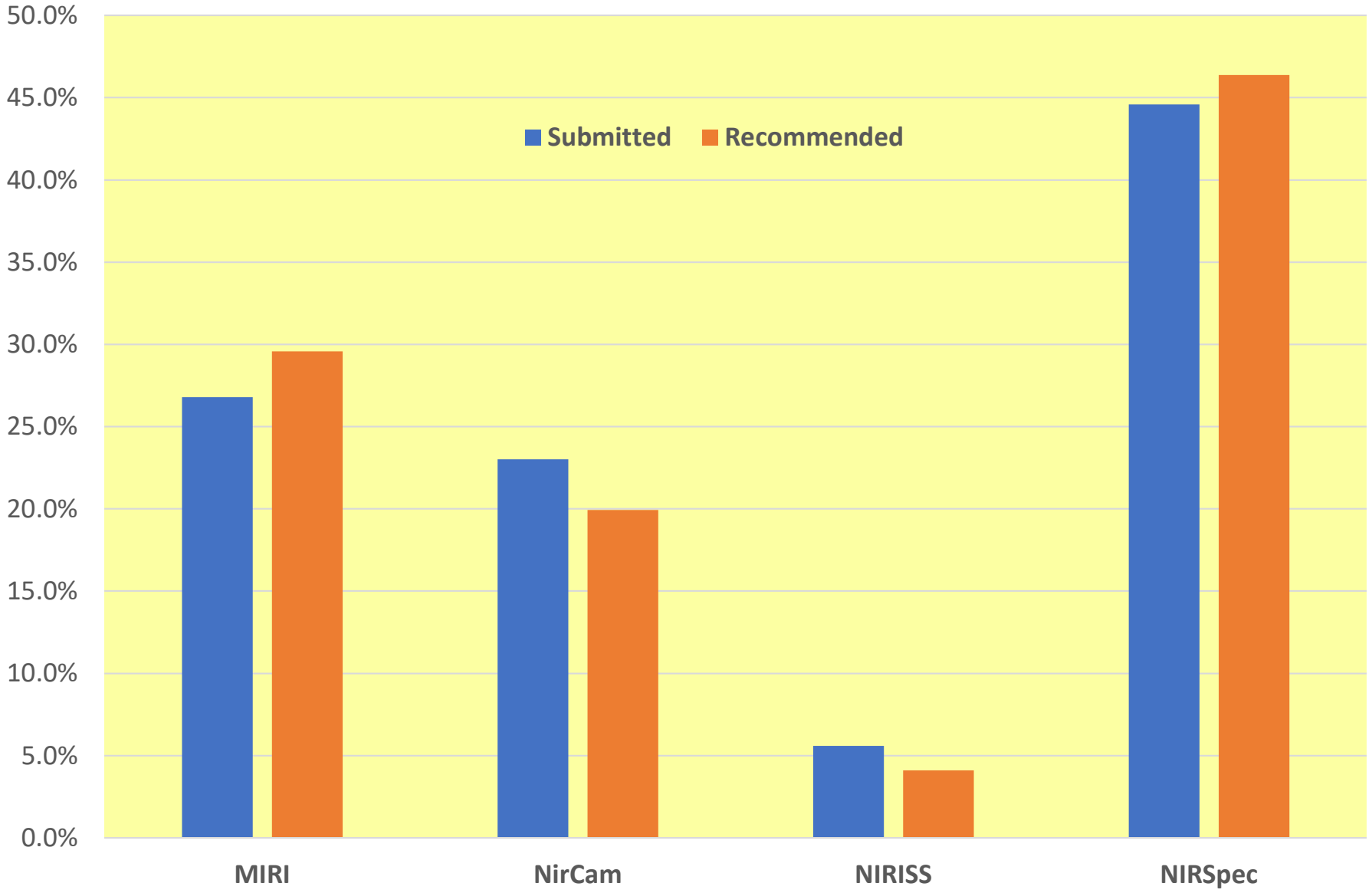


Instrument usage (by time)

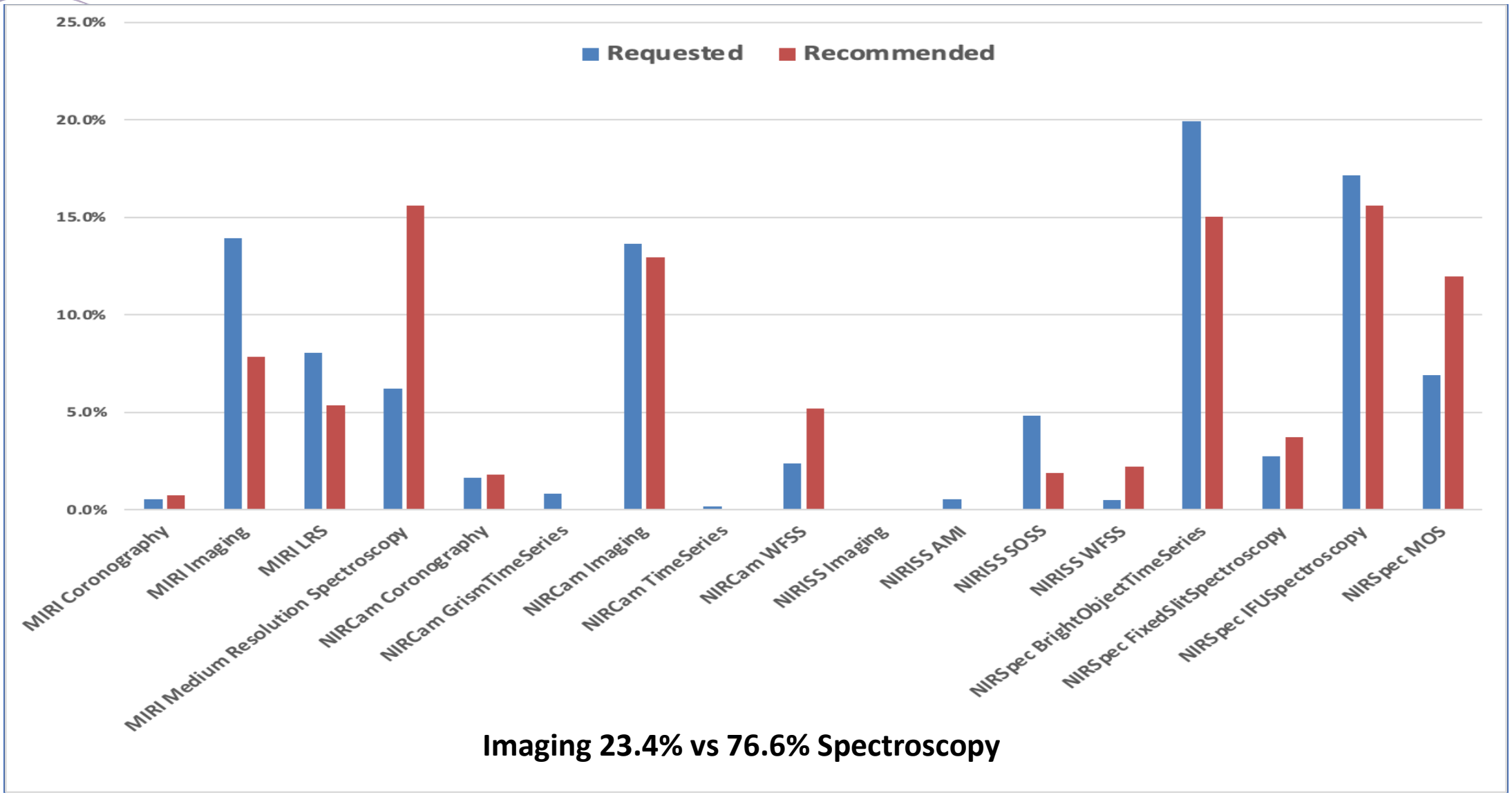
Instrument	Mode	Prime %	Coordinated Parallel %	Total (Prime + Coordinated parallels)	Instrument Prime Usage (all modes)	Instrument Prime + Coordinated Parallel Usage (all modes)	Pure Parallels
	MIRI Coronography	0.9%		0.8%			
MIRI	MIRI Imaging	8.6%	2%	7.8%	33.1%	29.6%	
	MIRI LRS	6.1%		5.4%			
	MIRI MRS	17.6%		15.6%			
	NIRCam Coronography	2.1%		1.8%			
	NIRCam GrismTimeSeries	0%		0%			
NirCam	NIRCam Imaging	11.5%	24.2%	12.9%	16.9%	19.9%	49.4%
	NIRCam TimeSeries	0%		0%			
	NIRCam WFSS	3.4%	19.6%	5.2%			
	NIRISS Imaging	0%		0%			
NIRISS	NIRISS AMI	0%		0%			
	NIRISS SOSS	2.1%		1.9%	3.4%	4.1%	
	NIRISS WFSS	1.3%	9.6%	2.2%			50.6%
	NIRSpec BrightObjectTimeSeries	17%		15.1%			
NIRSpec	NIRSpec FixedSlitSpectroscopy	4.2%		3.7%			
	NIRSpec IFUSpectroscopy	17.6%		15.6%	46.6%	46.4%	
	NIRSpec MOS	7.9%	44.6%	12%			

Imaging 23.4% vs 76.6% Spectroscopy

Instruments (fractional use by time, prime+coordinated parallels)

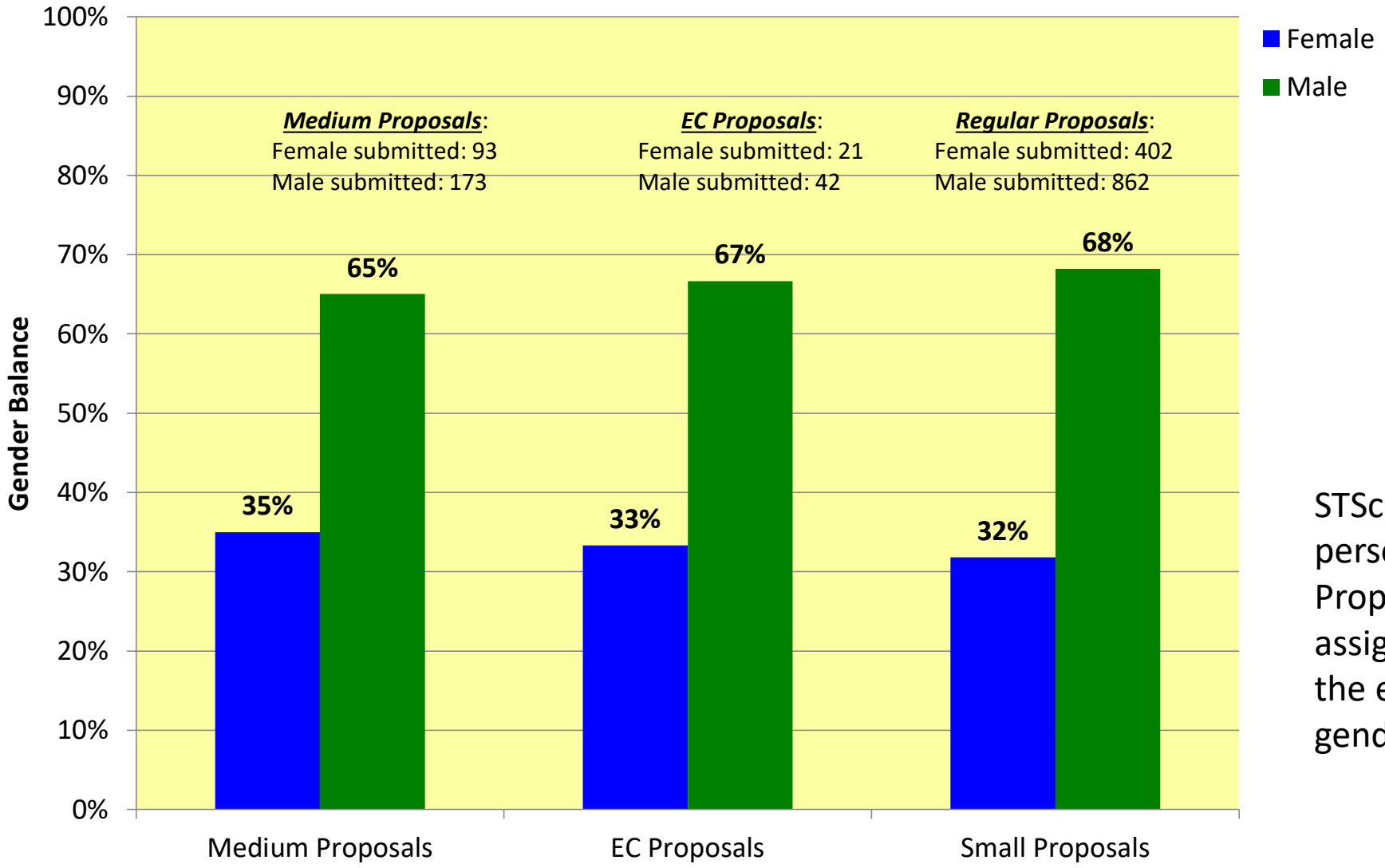


Instrument Modes (fractional use by time)



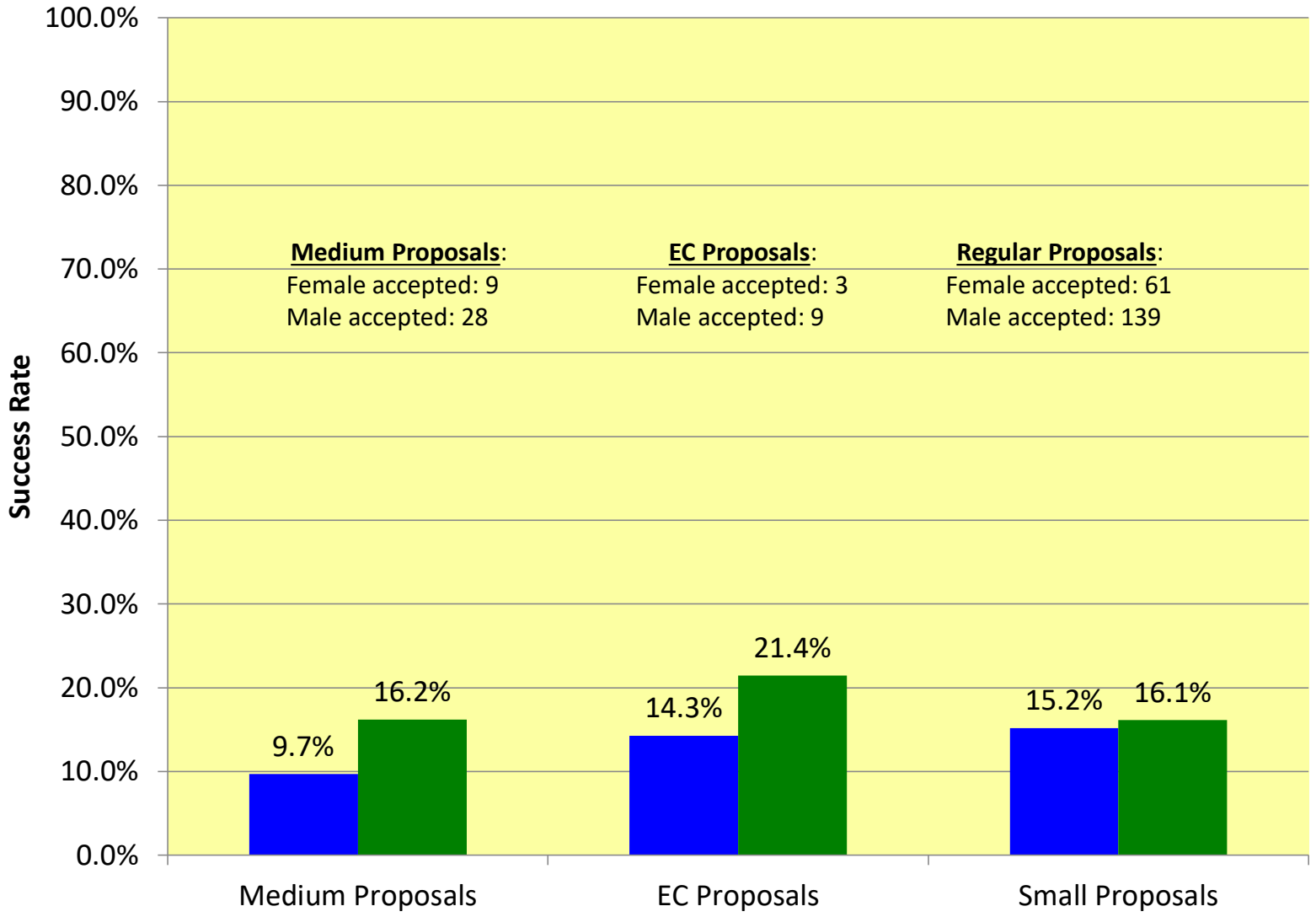
Imaging 23.4% vs 76.6% Spectroscopy

Gender Submission Stats



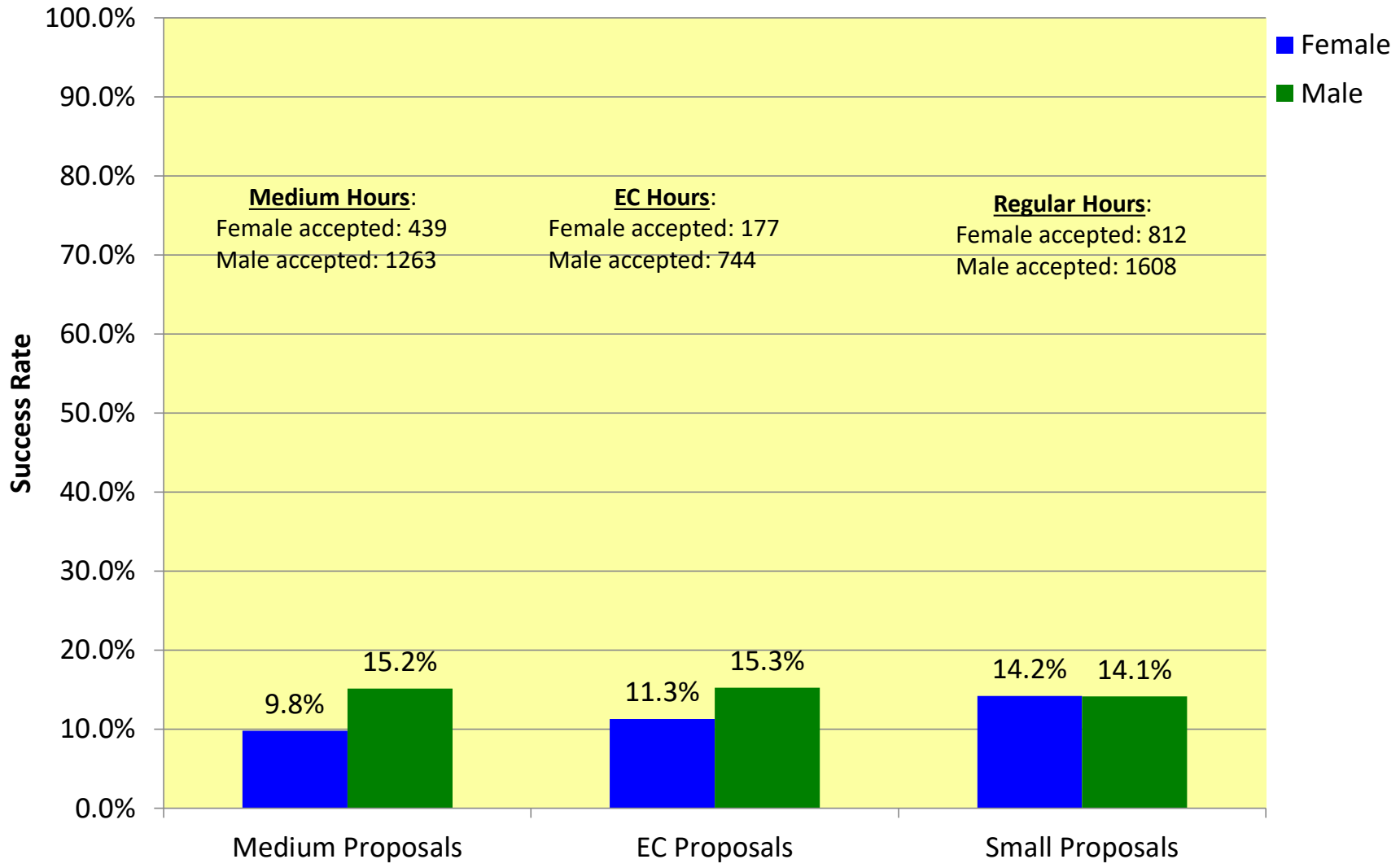
STScI does not collect personal information. Proposals are assigned based on the estimated PI gender

Gender Success Rates by Proposals

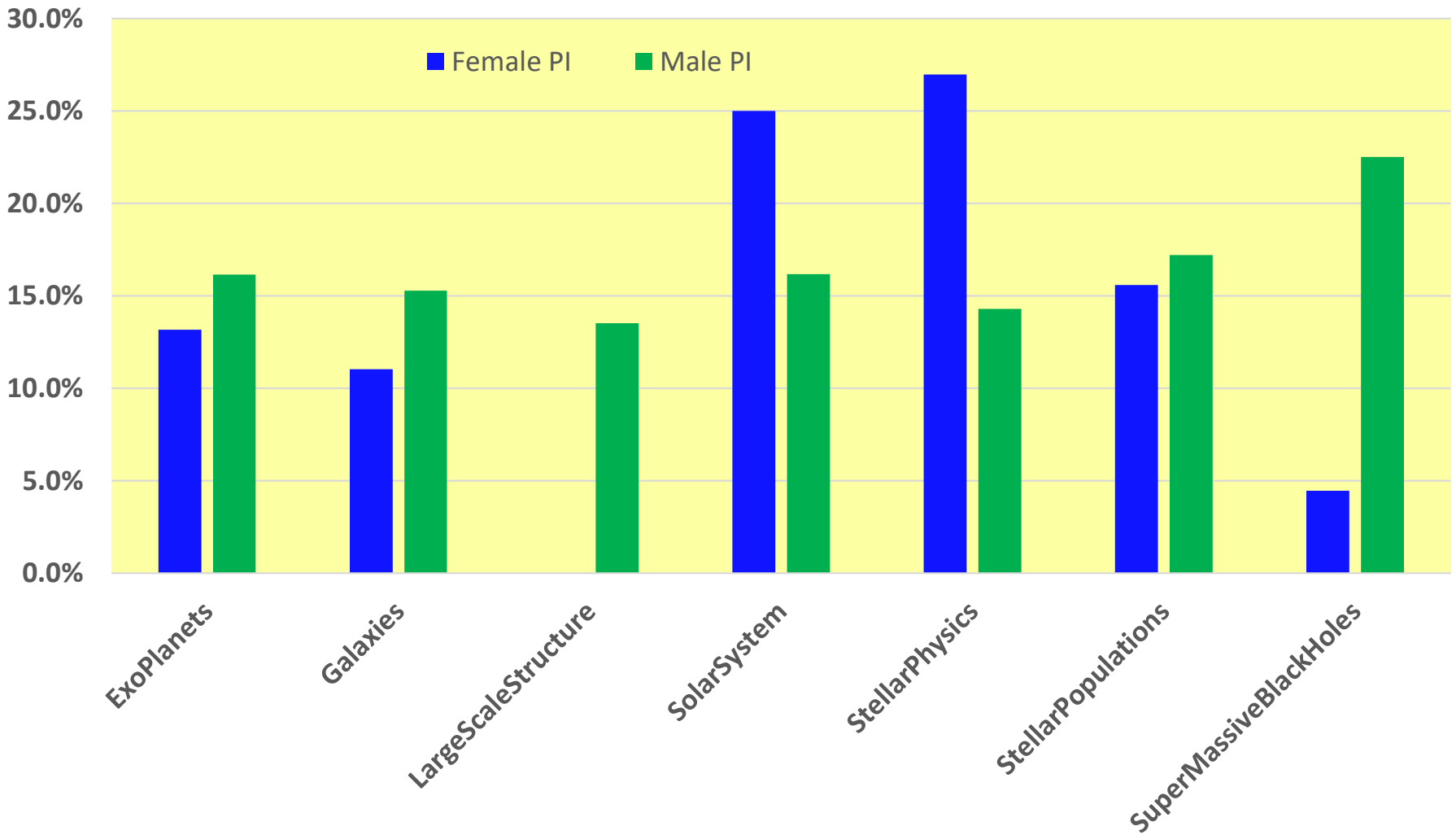


Success rate = Accepted/Submitted

Gender Success Rates by Hours



Gender Success by Science Category

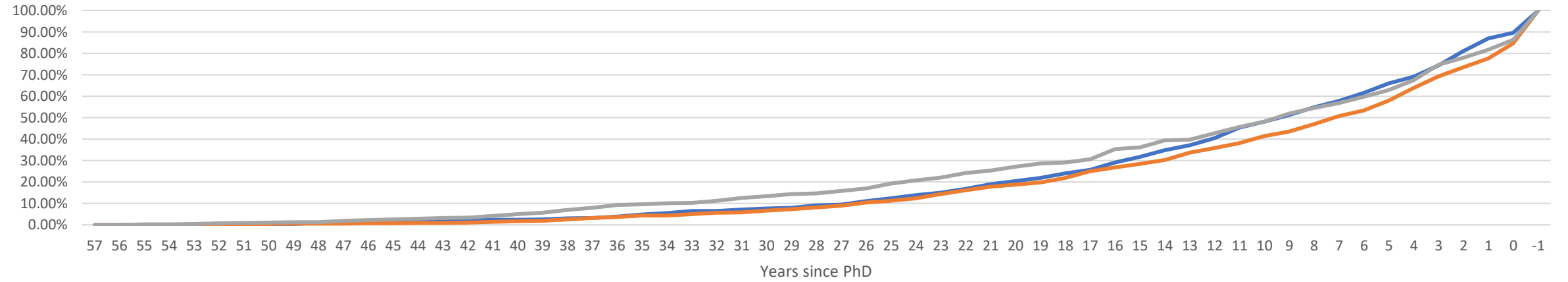


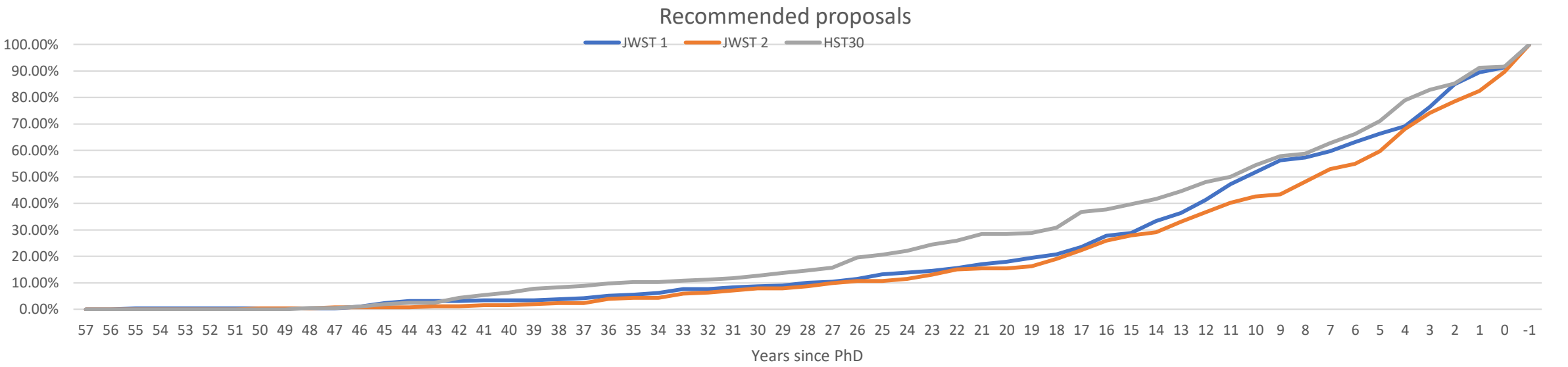
Gender Stats

- Fraction of submitted proposals with female PIs has increased to 32.4%
  - JWST Cycle 1 – 31.6%; HST Cycle 30 – 31%
- Fraction of female-PI accepted proposals is lower than Cycle 1 and HST Cycle 30
  - JWST Cycle 2 - 29.3% (73/249)
  - JWST Cycle 1 - 30.1% (86/286)
  - HST Cycle 30 - 29.9% (60/201)
- Triaged Proposals
  - 147/516 for female PIs, 28.5%
  - 301/1077 for male PIs, 27.9%

	JWST Approved	Cycle 2 Reviewed	Success Rate	JWST Cy1 Approved	JWST Cy1 Submitted	Success Rate
Proposals	249	1593	**15.6%**	286	1172	**24.4%**
Female PIs	73	516	**14.1%**	86	370	**23.2%**
Male PIs	176	1077	**16.3%**	200	802	**24.9%**

PI: Years since PhD





JWST Cycle 2 PIs trend towards more recent Phds/ more junior demographics than HST Cy 30 or JWST Cy 1

Dual Anonymous Violations

- **Fourteen proposals were identified that violated the Dual Anonymous Rules**
  - Identified either by individual SPG members or TAC members
- Each proposal was reviewed by the Science Policy Group
- Consensus recommendation made to the Director
- Eight proposals were deemed serious violations and were rejected for review
  - 5 GOs and 3 Ars
- 6 were minor violations and were reviewed by the TAC
- Appropriate feedback was provided to all proposers
- Overall percentage is generally consistent with prior HST and JWST reviews

Cycle 2 Resource Recommendation

Resource Recommendations

- 16 Archival Research (8 Theory/8 Regular)
- 7 Surveys for 832 Targets
- 2 PPARs for 1215 Hours
- 220 GO Prime Proposals + 4 GO/Calibration Proposals + 2 PPAR proposals = 226 total
- Plan for 5000 hours for GO (Larges + Mediums + Smalls)
  - 2900 for Small Proposals (<=25 hours)
  - 1250 for Medium Proposals (>25 – <=75 hours)
  - 850 for Large Proposals (>75 hours)
- 5070.87 Recommended for approval from Panels (includes 60.2 Calibration Hours)
  - 27.87 Duplication Reductions
  - 60.2 Calibration Reduction
- 4982.8 Hours is the GO Recommendation

Investigator Demographics

Countries of PIs

Country	Reviewed	Approved	Country	Reviewed	Approved	Country	Reviewed	Approved
Australia	19	4	Germany	58	14	Poland	3	
Austria	7		Greece	2		Portugal	3	1
Belgium	12	2	Hungary	5	1	Spain	34	4
Brazil	9		India	9		Sweden	27	5
Canada	53	11	Ireland	3	1	Switzerland	21	4
Chile	22	2	Israel	3		Taiwan	8	
China	13	1	Italy	79	5	Thailand	2	
Czech Republic	1		Japan	47	6	The Netherlands	39	4
Denmark	14	2	Korea	3	1	United Kingdom	138	23
Finland	7		Mexico	7		United States	886	148
France	56	10	Norway	2		Vietnam	1	
Total	**1593**	**249**						

US States by PIs

State	Reviewed	Approved	State	Reviewed	Approved	State	Reviewed	Approved
Alabama	5		Indiana	2		New Mexico	2	
Arizona	81	21	Kansas	6	1	New York	36	5
California	162	32	Kentucky	5		Ohio	21	6
Colorado	8	2	Louisiana	3	1	Oklahoma	3	2
Connecticut	8	2	Massachusetts	69	13	Oregon	1	
District of Columbia	25	5	Maryland	193	23	Pennsylvania	17	1
Delaware	1		Michigan	25	4	South Carolina	3	
Florida	20	3	Minnesota	7	2	Tennessee	3	
Georgia	1		Missouri	8	2	Texas	54	6
Hawaii	17	3	Montana	3		Utah	5	
Iowa	1		North Carolina	3		Virginia	26	4
Idaho	1		New Hampshire	2		Washington	6	
Illinois	33	7	New Jersey	8	2	Wisconsin	12	1

Countries of CoPIs

Country	Reviewed	Approved	Country	Reviewed	Approved	Country	Reviewed	Approved
Australia	9	4	Germany	42	8	Portugal	3	
Austria	6		Greece	2		Russia	1	
Belgium	4	1	Hungary	1		Spain	20	2
Brazil	5		India	1		Sweden	16	4
Canada	35	7	Iran	1		Switzerland	13	1
Chile	10	2	Israel	1		Taiwan	5	
China	11	1	Italy	37	5	The Netherlands	15	1
Denmark	14	4	Japan	10	2	Turkey	1	
Finland	2		Korea	2		United Kingdom	59	11
France	45	6	Mexico	4		United States	389	64
Total	**764**	**123**						

US States by CoPIs

State	Reviewed	Approved	State	Reviewed	Approved	State	Reviewed	Approved
Alaska	2		Kansas	2		New York	16	3
Alabama	1		Louisiana	1		Ohio	4	1
Arkansas	1		Massachusetts	40	10	Oklahoma	3	2
Arizona	45	4	Maryland	94	13	Oregon	3	
California	58	10	Michigan	15	1	Pennsylvania	8	3
Colorado	3		Minnesota	4	1	Texas	19	4
Connecticut	2	1	Missouri	1		Utah	1	
District of Columbia	9		Montana	3		Virginia	17	3
Florida	14	4	North Carolina	3		Washington	4	
Hawaii	4	1	New Jersey	3		Wisconsin	1	

Countries of CoIs

Country	Reviewed	Approved	Country	Reviewed	Approved	Country	Reviewed	Approved
Abu Dhabi	6	2	France	938	140	Poland	20	2
Argentina	2	1	Germany	1026	264	Portugal	37	1
Australia	265	55	Greece	44	14	Russia	26	8
Austria	60	9	Honduras	2	1	Serbia	8	1
Belgium	154	20	Hungary	42	6	South Africa	12	1
Bulgaria	1		India	74	3	Slovenia	10	5
Brazil	40	3	Iceland	9		Spain	575	125
Botswana	1		Iran	1		Sweden	262	74
Canada	524	111	Ireland	60	19	Switzerland	421	81
Chile	278	48	Israel	64	15	Taiwan	66	11
China	214	38	Italy	946	128	Thailand	19	4
Columbia	2		Japan	501	110	The Netherlands	604	101
Cyprus	11	1	Kazakhstan	1		The Vatican	1	
Czech Republic	9	1	Korea	44	6	Turkey	3	
Denmark	322	62	Mexico	60	8	Ukraine	5	2
Estonia	2		New Zealand	2		United Kingdom	1576	336
Finland	23	3	Norway	11	4	United States	8515	1605
			Unique CoIs	**5120**	**1968**	***Total CoIs***	**17899**	**3432**
CSA CoIs	**538**	**111**	***ESA CoIs***	**7340**	**1419**	***Unique Investigators***	**5450**	**2078**

US States by Cols

State	Reviewed	Approved	State	Reviewed	Approved	State	Reviewed	Approved
Alaska	6	2	Kansas	50	10	Nevada	5	3
Alabama	28	6	Kentucky	18	2	Ohio	173	36
Arkansas	11	4	Louisiana	7	1	Oklahoma	18	5
Arizona	807	183	Massachusetts	686	145	Pennsylvania	140	35
California	1493	271	Maryland	2231	379	Puerto Rico	1	
Colorado	100	24	Maine	19	1	South Carolina	15	
Connecticut	104	27	Michigan	200	37	Tennessee	26	4
District of Columbia	226	31	Minnesota	93	14	Texas	549	102
Delaware	5	2	Missouri	37	6	Utah	40	3
Florida	126	33	Mississippi	2		Virginia	216	38
Georgia	16		Montana	6		Virgin Islands	3	2
Hawaii	125	23	North Carolina	23	3	Vermont	2	
Iowa	3		New Hampshire	13		Washington	66	8
Idaho	2		New Jersey	128	27	Wisconsin	93	23
Illinois	235	39	New Mexico	25	5	West Virginia	5	1
Indiana	1		New York	321	66	Wyoming	16	4

Canadian (CSA) Provinces and Territories

PIs			CoPIs		CoIs	
Territory	**Reviewed**	**Approved**	**Reviewed**	**Approved**	**Reviewed**	**Approved**
Alberta	3	1	2	2	21	6
British Columbia	7	2	5	2	87	17
Manitoba	2	0	1	0	21	7
Nova Scotia	3	1	4	1	31	14
Ontario	14	4	7	0	169	35
Quebec	24	3	15	2	197	32
STScI	1	0	0	0	12	3

ESA Countries

	PIs		CoPIS		CoIs			PIs		CoPIS		CoIs	
Country	**Reviewed**	**Approved**	**Reviewed**	**Approved**	**Reviewed**	**Approved**	**Country**	**Reviewed**	**Approved**	**Reviewed**	**Approved**	**Reviewed**	**Approved**
Austria	7		6		60	9	Poland	3		0		20	2
Belgium	12	2	4	1	154	20	Portugal	3	1	3		37	1
Czech Republic	1		0		9	1	Romania	0		0		0	
Denmark	14	2	14	4	323	67	Spain	34	4	20	2	577	125
Estonia	0		0		2		Sweden	27	5	16	4	262	76
Finland	7		2		23	3	Switzerland	21	4	13	2	421	83
France	56	10	45	6	938	141	The Netherlands	39	4	15	1	604	104
Germany	58	14	42	8	1026	265	United Kingdom	138	23	59	11	1576	338
Greece	2		2		44	*14*	*Bulgaria*	0		0		1	
Hungary	5	1	1		42	*6*	*ESO (Chile)*	3		2	1	51	8
Ireland	3	1	0		61	*19*	*Cyprus*	0		0		11	1
Italy	79	5	37	5	946	*130*	*Slovenia*	0		0		10	6
Luxembourg	0		0		0		*ESA STScI*	13		10	1	153	37
Norway	2		0		11	**4**		**527**	**76**	**291**	**45**	**7362**	**1419**

TAC Process Summary

Cycle 2 TAC review process

- 19 topical panels for smaller proposals – each panel has a time allocation (N hours)
  - 5 external panels for proposals requesting ≤ 15 hours
  - 14 in-person discussion panels for small >15 hours, medium (35 – 75 hours) & AR programs
- All proposals are in dual anonymous format
- Executive committee (panel chairs + at-large) review larger proposals
  - ≥75 hours, Treasury programs, AR Legacy programs
- Preliminary grades submitted ~10-14 days before the meeting
  - Initial ranked list determined but not communicated to the panel
- Initial ranked list used to identify lowest-ranked up to 40% of proposals
  - Those proposals are marked for triage
  - Panelists can raise triaged proposals for discussion during the virtual meeting
- Remaining proposals are discussed at the virtual meeting & panelists re-grade
- The proposals are ranked once the grading is complete
- Panels can re-rank based on science balance, panel consensus
  - 1N line marks the panel recommendations to the ST Director
  - Panels rank to 2N to provide contingency
- Once the re-ranking is complete, the team expertise is available for panel review

JWST TAC logistics

- TAC meeting took place virtually on April 17-20 (topical discussion panels) &in-person at STScI on April 24-27 (Executive Committee)
  - 547 astronomers from the community participated in the process
    - TAC Chair – Roberto Abraham, University of Toronto
  - 9 observers from NASA Project, ESA, CSA
  - Each panel supported by STScI staff members as panel support scientists and levelers
  - ~100 STScI staff in support – science policies, panel support staff, IT, instrumentation, scheduling, levelers
- Each panel was assigned a dedicated bluejeans link and associated slack channel
  - Additional slack channels for observers, levelers, PSS, SPG, TAC co-chairs & others
- All proposals receive feedback on strengths and weaknesses
  - Results and feedback will be distributed to the community on May 10th