# Cycle 23 Summary and 

## Changes for Cycle 24

## 5 November 2015

## Summary Results

| Proposals | Requested | Approved | \% Accepted | ESA <br> Accepted | $\frac{\text { ESA \% }}{\text { Total }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General |  |  |  |  |  |
| Observer | 891 | 202 | 22.7\% | 56 | 27.7\% |
| Snapshot Archival | 42 | 10 | 23.8\% | 3 | 30.0\% |
| Research | 96 | 28 | 29.2\% | 0 |  |
| AR Legacy | 11 | 3 | 27.3\% | 0 |  |
| Theory | 75 | 18 | 24.0\% | 0 |  |
| Total | 1115 | 261 | 23.4\% | 59 | 27.8\% |
| Primary |  |  |  |  |  |
| Orbits | 19301 | 3563 | 18.5\% | 1041 | 29.2\% |
| ESA Orbits/Proposals is GO/Snap only Primary Orbits doesn't include 2 Calibration Orbits |  |  |  |  |  |
|  |  |  |  |  |  |

## Programs Recommended by the TAC

| ID | First Name | Last Name | Institution | Resources | Title |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0248 | Daniel | Apai | University of Arizona | 114 Orbits | Cloud Atlas: Vertical Cloud Structure and Gravity in Exoplanet and Brown Dwarf Atmospheres |
| 0463 | Luigi | Bedin | Osservatorio Astronomico di Padova | $66+66$ Orbits | The end of the White Dwarf Cooling Sequences of Omega Centauri |
| 0149 | Sanchayeeta | Borthakur | The Johns Hopkins University | 100 Orbits | How are HI Disks Fed? Probing Condensation at the DiskHalo Interface |
| 0072 | Marusa | Bradac | University of Califomia Davis | AR Legacy | Breaking Cosmic Dawn: Observing the $z>\sim 7$ Universe Through Cosmic Telescopes |
| 0375 | Dan | Coe | Space Telescope Science Institute - ESA | 190 Orbits | RELICS: Reionization Lensing Cluster Survey |
| 0754 | Drake | Deming | University of Maryland | 124 Orbits | A Metallicity and Cloud Survey of Exoplanetary Atmospheres Prior to JWST |
| 0961 | Robert | Kirshner | Harvard University | 100 Orbits | RAISIN2: Tracers of cosmic expansion with SN IA in the IR |
| 0095 | Nicolas | Lehner | University of Notre Dame | 93 Orbits | Project AMIGA: Mapping the Circumgalactic Medium of Andromeda |
| 0088 | Matthew | Malkan | University of Califomia Los Angeles | 20 Pure Parallel | WFC3 Infrared Spectroscopic Parallel Survey: The WISP Deep Fields |
| 1085 | Danilo | Marchesini | Tufts University | AR Legacy | A Legacy Archive Program Providing Optical/NIRselected Multiwavelength Catalogs and High-level Science Products of the HST Frontier Fields |
| 0957 | Tom | Megeath | University of Toledo | 312 Snap Targets | A Snapshot WFC3 IR Survey of Spitzer/Hershel-Identified Protostars in Nearby Molecular Clouds |
| 0096 | Eric | Murphy | California Institute of Technology | AR Legacy | Enhancing the Frontier Field Legacy by Combining the Power of HST and the Jansky VLA |
| 0359 | Casey | Papovich | Texas A \& M University | 130 Orbits | The CANDELS Lyman-alpha Emission At Reionization (CLEAR) Experiment |
| 0093 | Ruth | Peterson | SETI Institute | 72 Orbits | The Intersection of Atomic Physics and Astrophysics: Identifying UV Fe I Lines from Metal-Poor Tumoff Stars |
| 0395 | Brian | Siana | University of Califomia Riverside | 48 Orbits | The Final UV Frontier. Legacy Near-UV Imaging of the Frontier Fields |

## Medium Programs Recommended by the Panels

| ID | First <br> Name <br> Zachory | Last Name <br> Berta- <br> Thompson <br> Fumagalli | Institution <br> Massachusetts Institute <br> of Technology <br> University of Durham | Resources | 40 |
| :---: | :--- | :--- | :--- | :--- | :--- |

## Mission Support Proposals

| First <br> Name | Last Name | Panel | Orbits | Titile | Decision | Mission |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dean | Hines | Planets2 | 16 | Post-Perihelion Imaging Polarimetry of the 67P/Churyumov-Gerasimenko with ACS: Continued Support of the Rosetta Mission | Recommend | Rosetta |
| Jonathan | Nichols | Planets1 | 47 | Observing Jupiter's FUV auroras near Juno orbit insertion | Recommend | Juno |
| Laurent | Lamy | Planets2 | 6+25 | The Grand Finale : probing the origin of Saturn s aurorae with HST observations simultaneous to Cassini polar measurements | Recommend | Cassini |
| Susan | Benecchi | Planets2 | 19 | Collisional Processing in the Kuiper Belt and LongRange KBO Observations by New Horizons | Recommend | New Horizons |

## 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



## Instrument Summary

| Configuration <br> ACS/SBC | Mode <br> Imaging | Prime \% $2.0 \%$ | Coordinated <br> Parallel \% <br> 0.0\% | Total $1.7 \%$ | Instrument <br> Prime Usage | Instrument Prime + Coordinated Parallel Usage | Pure Parallel Usage 0.0\% | Snap Usage $0.0 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACS/SBC | Spectroscopy | 0.2\% | 0.0\% | 0.2\% |  |  | 0.0\% | 0.0\% |
| ACS/WFC | Imaging | 12.7\% | 52.0\% | 18.2\% |  |  | 0.0\% | 16.0\% |
| ACS/WFC | Ramp Filter | 0.0\% | 0.0\% | 0.0\% | 15.0\% | 20.2\% | 0.0\% | 0.0\% |
| ACS/WFC | Spectroscopy | 0.1\% | 0.0\% | 0.1\% |  |  | 0.0\% | 0.0\% |
| cos/Fuv | Spectroscopy | 19.4\% | 0.0\% | 16.7\% |  |  | 0.0\% | 6.0\% |
| cos/nuv | Imaging | 0.0\% | 0.0\% | 0.0\% | 22.9\% | 19.7\% | 0.0\% | 0.0\% |
| cos/nuv | Spectroscopy | 3.5\% | 0.0\% | 3.0\% |  |  | 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 | 0.1\% | 0.0\% | 0.1\% |  |  | 0.0\% | 0.0\% |
| STIS/CCD | Spectroscopy | 4.4\% | 0.0\% | 3.8\% |  |  | 0.0\% | 6.0\% |
| STIS/FUV | Imaging | 1.5\% | 0.0\% | 1.3\% | 16.5\% | 14.2\% | 0.0\% | 0.0\% |
| STIS/FUV | Spectroscopy | 3.9\% | 0.0\% | 3.3\% |  |  | 0.0\% | 0.0\% |
| STIS/NUV | Imaging | 0.1\% | 0.0\% | 0.1\% |  |  | 0.0\% | 0.0\% |
| STIS/NUV | Spectroscopy | 6.6\% | 0.0\% | 5.6\% |  |  | 0.0\% | 0.0\% |
| WFC3/ $\mathbb{R}$ | Imaging | 17.8\% | 15.8\% | 17.5\% |  |  | 40.0\% | 43.0\% |
| WFC $3 / \mathbb{R}$ | Spectroscopy | 10.6\% | 0.0\% | 9.1\% | 45.6\% | 45.9\% | 23.0\% | 0.0\% |
| WFC3/UVIS | Imaging | 15.7\% | 32.2\% | 18.0\% |  |  | 37.0\% | 29.0\% |
| WFC3/UVIS | Spectroscopy | 1.5\% | 0.0\% | 1.3\% |  |  | 0.0\% | 0.0\% |
|  |  | 100\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

## Targets of Opportunity

| ID First | Last Name | Orbits | Disruptive Activations | NonDisruptive Activations | Total Activations | MultiCycle | Type of ToO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0023 Steven | Rodney | 20 |  | 5 | 5 |  | FF Supernova Search |
| 0066 Imke | de Pater | 2 | 1 |  | 1 | Yes | Jupiter or Saturn |
| 0074 Avi | Gal-Yam | 22 | 1 |  | 1 |  | Infant Core Collapse Supernovea |
| 0322 Patrick | Kelly | 28 |  | 1 | 1 | Yes | Supernovae Refsdal |
| 0375 Dan | Coe | 20 |  | 8 | 8 |  | Lensed or High Z Supernovae Followup |
| 0380 Mathew | Darnley | 20 | 1 |  | 1 |  | Nova in M31 |
| 0476 Andrew | Levan | 4 |  | 1 | 1 | Yes | Gravitational Wave Transient |
| 0482 Nial | Tanvir | 12 | 1 |  |  |  | Kilanova Short Duration GRB |
| 0509 Schuyler | Van Dyk | 4 |  | 4 | 4 |  | Supernova |
| 0541 Nial | Tanvir | 7 | 1 |  |  | Yes | High Redshift GRB |
| 0670 David | Jewitt | 2 |  | 1 | 1 |  | Asteroid |
| 0757 Peter | Brown | 7 | 1 |  |  | Yes | UV Type 1a Supernova |
| 0809 Dennis | Bodewits | 10 |  | 2 | 2 |  | Comet |
| 0833 Eleonora | Troja | 12 | 1 |  | 1 | Yes | Short Duration GRB |
| 0961 Robert | Kirshner | 100 |  | 25 | 25 |  | Supernova la |
| 0986 Shri | Kulkarni | 3 | 1 |  | 1 |  | Supernova la |
| 0995 Armin | Rest | 12 |  | 1 | 1 | Yes | Cas A |
| 1024 Howard | Bond | 8 |  | 8 | 8 |  | Mid InfraRed Transients |
|  |  | 293 | 8 | 56 | 61 |  |  |

* 0074 Ultra Rapid Activation


## Cycle 24 Features

- Cycle 24 will start on 10/1/16 and end on 9/30/17
- 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 C 23 will be offered


## Cycle 24 Features (cont.)

- Chairs for all 14 panels have been selected and have agreed to serve
- Panel Chairs and three At-Large members will form the TAC chaired by Caty Pilachowski (Indiana University)
- Each panel will have 9 Panelists and the Chair
- Candidate Panelists are currently being contacted
- Pay particular attention to diversity and balance between senior and junior astronomers


## Available Orbits in Cycle 24

- Roughly $\mathbf{3 4 0 0}$ orbits available for Cycle 24 GO's
- Same number as in Cycle 23
- Break-down:
- $\mathbf{1 0 0 0}$ orbits for the TAC (Large and Treasury)
- $\mathbf{2 4 0 0}$ orbits for the 14 Panels (Regular GO with $<75$ orbits, i.e., Small and Medium)
- We anticipate $\sim \mathbf{7 0 0}$ out of the 2400 orbits will be allocated for medium-sized proposals ( $35-74$ orbits)
- Distribution may be adjusted based on proposal pressure


## Cycle 24 Panels

- 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)
- Massive Black Holes and their Hosts Panels (AGN/Quasars)
- Large-Scale Structure of the Universe Panels (Quasar Absorption Lines and IGM, Cosmology)


## Cycle 24 Panel Changes

- Planets and Planet Formation Panels: no solar system science
- Solar system will be one separate panel following suggestions from both the solar system and exoplanet communities
- Solar system panelists will be recruited after the proposal deadline to minimize conflicts
- Solicit external reviews for solar system and consider a virtual panel
- Massive Black Holes and their Hosts Panel: no IGM science
- The two mirror panels will review only AGN science
- Maximizes panelist expertise for the proposals
- Addresses panel size: AGN/IGM panels had 100+ proposals in the past
- Large-Scale Structure of the Universe Panel: includes IGM and Cosmology
- IGM is a natural match for large-scale structure and cosmology
- Adds more orbit requests to the Cosmology panels, which were the smallest panels in terms of orbit allocation in the past


## TAC Process: Medium Proposals

- The Medium category will again be supported. However, adjustments to the process are needed:
- The TAC does not have the time for an adequate review of highly-ranked Medium proposals.
- Cross-panel reviews are infeasible because of multiple conflicts of panelists for Medium proposals
- We will assign a Medium proposal allocation to each panels (probably one proposal per panel).
- The panels will grade and rank the Medium proposals with the Small proposals.
- The top-ranked medium proposal in each panel will be recommended for execution provided that that proposal is above the cutoff line
- The panels can adjust their own Small/Medium allocation split if they want to support any Medium proposals that did not make the cut.
- Panel chairs will report to the TAC on the highly-ranked Medium proposals before it considers the Large \& Treasury programs.
- The Director has the final decision


## Cycle 24 Proposal Review Schedule

- 01/13/16: Call for Proposals release
- 04/08/16: Phase I Proposal deadline
- 04/29/16: Proposals made available to panels
- 05/25/16: Preliminary grades due
- 06/05/16 - 06/10/16: Panels and TAC meet
- 06/27/16: Notifications sent out
- 07/21/16: Phase 2 and budget deadlines

