Spitzer Cycle-11 Program Selection

Cycle-11 Overview

- **157 proposals received – 41,970 hours**
  - *137 proposals in Cycle-10 – 31,817 hours*

- **Call for Proposals Solicited**
  - *6000 – 8500 hrs Large/Exploration Science*
  - *700 hrs small/medium*
  - *Priority 1: 5700 - 8200 hours Priority 2: 1000 hours*
    - Additional priority 2 and 3 time as recommended by TAC

Review Process

- **Small + Medium proposals**
  - *Galactic & Extragalactic: Graded by external reviewers, no panel discussion*
  - *Solar System: Reviewed by the Solar System panel with the Large and ES proposals*

- **Large + Exploration Science proposals**
  - *Reviewed by topical science panels and Time Allocation Committee (TAC)*
  - *Panels and TAC met at the SSC, December 3-5, 2014*

Scheduling Priorities

- **Priority 1**
  - *SSC will endeavor to schedule all priority 1 programs*
  - *Since many are highly constrained, some priority 1 programs may not be fully completed in Cycles 11 and 12.*
- **Priority 2**
  - *Will execute in gaps in the schedule where no priority 1 programs are available to schedule.*
- **Priority 3**
  - *Unlikely to schedule unless gaps develop in the schedule where no priority 1 or 2 programs are available.*

Selected Programs

- **45 Priority 1 programs selected, 9069 hours**
  - *New Spitzer PIs for 14 of 45 priority 1 programs*
  - *Priority 1 time oversubscribed by a factor of 4.6*

Scheduling Priority	1		2		3	
	Hours	#	Hours	#	Hours	#
Exploration Science	6756	7				
Large	1703	8	346	1	908	4
Medium	548	13	99	4		
Small	62	17				
Total	**9069**	**45**	**445**	**5**	**908**	**4**

Exploration Science Programs

PID	Science Category	Hours	PI	Institution
11002	NEOs	710.1	David Trilling	NAU
An Exploration Science Survey of Near Earth Object Properties				
11006	Exoplanets	832.0	Andrew Gould	Ohio State
Galactic Distribution of Planets from Spitzer Microlens Parallaxes				
11063	Time Domain	791.9	Mansi Kasliwal	Carnegie Obs/Caltech
SPIRITS: SPitzer InfraRed Intensive Transients Survey				
11174	Brown Dwarfs	512.5	Stan Metchev	Western Ontario
A Paradigm Shift in Substellar Classification: Understanding the Apparent Diversity of Substellar Atmospheres through Viewing Geometry				
11016	High-z Galaxies	1776.5	Karina Caputi	Groningen
SMUVS: Spitzer Matching survey of the UltraVISTA ultra-deep Stripes				
11086	High-z Galaxies	1400.0	Mark Lacy	NRAO
A warm Spitzer survey of the LSST/DES "Deep drilling" fields				
11134	High-z Galaxies	733.3	Ivo Labbe	Leiden
GREATS: GOODS Re-ionization Era wide-Area Treasury from Spitzer				

Large Programs

PID	Science Category	Hours	PI	Institution
Priority 1				
11106	Comets	237.6	Michael Kelley	Maryland
11093	Debris Disks	130.0	Kate Su	Arizona
11026	Exoplanets	455.0	Mike Werner	JPL
11044	Exoplanets	132.3	Ian Crossfield	Arizona
11092	Exoplanets	250.5	Etienne Artigau	Montreal
11099*	Exoplanets	134.3	Laura Kreidberg	Chicago
11131	Exoplanets	163.5	Diana Dragomir	UC Santa Barbara
11065	AGN/QSOs	200.0	Varoujan Gorjian	JPL
Priority 2				
11080	High-z Clusters	346.0	Anthony Gonzalez	Florida
Priority 3				
11116	High-z Galaxies	292.3	Daniel Perley	Caltech
11073	Exoplanets	237.1	Nicolas Cowan	Amherst College
11089	Exoplanets	181.0	Brice-Olivier Demory	Cambridge
11161	Exoplanets	197.1	Niall Deacon	Hertfordshire

* Joint Program: Includes award of 30 HST orbits

Medium & Small Proposals

Science Category	Priority 1		Priority 2	
	Hours	#	Hours	#
Solar System				
Asteroids	72.2	2		
Comets	1.6	1		
KBOs	6.5	1		
Satellites	5.1	1		
Galactic				
Brown Dwarfs	148.8	5		
Debris Disks	7.7	2		
Evolved Stars	4.2	2	40.7	1
Stars in other Galaxies	2.9	1		
Exoplanets	109.3	4		
ISM			15.2	1
Extragalactic				
AGN/ULIRGS	30.5	2		
Local Group/Nearby Gals	89.5	4		
High-z Clusters	51.5	2		
High-z Galaxies	80.3	3	42.8	2
Totals	610.1	30	98.7	4

Joint Hubble/Chandra Proposals

- **16 joint proposals submitted, 14 HST & 2 CXO**
  - *The available HST orbits were oversubscribed by 2.8*
- **5 joint Spitzer-HST programs selected**

PID	PI	Spitzer Hours	HST Orbits	Title
11099	Kreidberg	134.3	30	Exploring the Frontier of Exoplanet Atmosphere Dynamics with NASA's Great Observatories
11141	Cushing	20.5	14	A Spitzer/HST Case Study of Weather on a Y Dwarf
11132	Radigan	14.5	6	Constraining Dust Hazes at the L/T Transition via Variability
11071	Espaillat	6.0	4	Exploring the Dust-Gas Connection in the Protoplanetary Disk of GM Aur
11084	Kochanek	3.4	4	Dust to Dust: Monitoring the Evolution of the New Class of Self-Obscured Transient

Note: Two other programs were awarded just the requested Spitzer time as the HST time was not considered essential the science.

Our Solar System

PID	Science Category	Hours	PI	Institution
11002	NEOs	710.1	David Trilling	NAU
An Exploration Science Survey of Near Earth Object Properties				
11106	Comets	237.6	Michael Kelley	Maryland
CO2 Orbital Trends in Comets				
11097	Asteroids	50.0	Ben Rozitis	Tennessee
Thermal Emission Light-Curves of Rapidly Rotating Asteroids				
11145	Asteroids	22.2	Eric MacLennan	Tennessee
Regolith Size Sorting on Q-type NEAs				
11090	KBOs	6.5	Noemi Pinilla-Alonso	Tennessee
Rotationally resolved study of the surface of Pluto during NASA New Horizons flyby …				
11112	Satellites	5.1	Richard Cartwright	Tennessee
North Polar Surfaces of the Uranian Moons: Coated with CO2 Frost?				
11104	Comets	1.6	Matthew Knight	Lowell Obs.
P/1999 R1: Sunskirting comet or asteroid?				

- **1033.1 hours selected (15 props, 3514.2 hrs submitted)**
  - *Three are led by new Spitzer PIs*

Foreign Led Proposals

- **9 priority 1 programs have PIs at foreign institutions**
  - *3 Exploration Science*
  - *1 Large*
  - *5 Medium/Small*

- **Programs total 3359 hours**

- **37% of the priority 1 time (typically 10-20%)**

Submitted/Selected by Size

Proposal Size	Submitted		Selected - Priority 1			
	Hours	Props	Hours	Props	% Hours	% Props
ES	31701.7	21	6756.3	7	21.3%	33.3%
Large	7614.9	32	1703.2	8	22.4%	25.0%
Medium	2486.3	67	548.3	13	22.1%	19.4%
Small	167.1	37	61.8	17	37.0%	45.9%
Total	41970.0	157	9069.6	45	21.6%	28.7%

Submitted/Selected
by Science Category

Science Category	Submitted		Selected					
			Priority 1		Priority 2		Priority 3	
	Hours	Props	Hours	#	Hours	#	Hours	#
Our Solar System								
Asteroids	142.3	5	72.2	2				
Comets	597.8	4	239.2	2				
Kuiper Belt Objects	44.3	2	6.5	1				
Near Earth Objects	2710.1	2	710.1	1				
Satellites	19.7	2	5.1	1				
Our Galaxy								
Brown Dwarfs	1441.6	15	661.3	6				
Compact Objects	251.4	4						
Debris Disks	383.4	11	137.7	3				
Evolved Stars	126.4	10	4.2	2	40.7	1		
Exoplanets	12260.0	35	2076.9	10			615.2	3
ISM	23.8	2			15.2	1		
Star Form/Stellar Pops	1381.3	7	794.8	2				
YSOs	292.1	3						
Extragalactic								
AGN/QSOs/ULIRGS	843.6	10	230.5	3				
Galaxy Clusters	489.5	7	51.5	2	346.0	1		
High-z Gals/Cosmol.	18846.0	26	3990.1	6	42.8	2	292.3	1
Low Redshift Gals	1051.2	2	0.0	0				
Local Group	106.8	4	82.8	3				
Nearby Galaxies	958.7	6	6.7	1				
Total	**41970.0**	**157**	**9069.6**	**45**	**444.7**	**5**	**907.5**	**4**