Spitzer Space Telescope
Cycle-5 Selection
Statistics

Awards

The science programs recommended by the TAC for selection by the SSC Director are:

General Observer - Priority 1 & 2		**2863 hours**
Legacy	4 programs	340 hours
Medium	13 programs	733 hours
Small	121 programs	1790 hours
General Observer - Priority 3		**2281 hours**
Legacy	3 programs	322 hours
Medium	5 programs	388 hours
Small	85 programs	1571 hours
Archive	21 programs	$1,525,000
Theory	6 programs	$ 550,000

Selected Legacy Programs

- Joe Harrington (UCF): 60 hours *(priority 1)*
  - *New Transiting Exoplanets: Targets of Opportunity for Spitzer's Legacy*
- Sean Carey (SSC): 149 hours *(priority 2)*
  - *Spitzer Mapping of the Outer Galaxy (SMOG)*
- David Schiminovich (Columbia): 136.2 hours
  - *S5: The Spitzer SDSS Statistical Spectroscopic Survey*
    (45 hrs priority 2 + 96.2 hrs priority 3)
- Nick Scoville (Caltech): 85.6 hours *(priority 2)*
  - *IRS Legacy Survey of the Green Valley in COSMOS*
- Buell Jannuzi (NOAO): 129.5 hours *(priority 3)*
  - *MIPS AGN and Galaxy Evolution Survey*
- Eiichi Egami (Arizona): 101.7 hours *(priority 3)*
  - *Ultra-Deep MIPS Imaging of the Lockman Hole*

Selected Medium Programs

PI		Institution	Hours	Title
Priority 1				
Heather	Knutson	Harvard	110	Mapping the Atmospheres of the Smallest Transiting Exoplanets
John	Stansberry	Arizona	77.8	Densities, Diameters and Albedos of Trans-Neptunian Binaries
John	Carr	NRL	59.6	Water and Organic Molecules in the Planet Formation Region of Disks
Kristen	Coppin	Durham	58.4	Starburst or AGN dominance in submm-luminous candidate AGN
Nicolas	Flagey	IAS	56.1	The Eagle Nebula: a spectral template for star forming regions
Lee	Armus	SSC	56	Mapping GOALS: IRS Spectral Mapping of a Complete Sample of LIRGs in the Local Universe
Dan	Watson	Rochester	46	** Evolution of infall and envelope-disk accretion in protostars
Lee	Armus	SSC	35.7	** Dust in the Wind: Mapping the Nearest Galactic Superwind with IRS
Mark	Lacy	SSC	12.1	** Spectroscopic confirmation of two candidate z~8 galaxies with IRS
Priority 2				
Mark	Devlin	Pennsylvania	91.6	Spitzer South Ecliptic Pole Survey
Scott	Chapman	U. Cambridge	53.8	Mid-IR spectroscopy of hot and dusty, luminous high-z star forming galaxies
Peter	Capak	SSC	46	** Unveiling the Physics of the First Galaxies
Pauline	Barmby	W. Ontario	30	** The Local Group Dwarf Spheroidals
Priority 3				
Sahar	Allam	Wyoming	114.5	Doubling the Sample of Bright Lensed LBGs Observed by Spitzer
Min	Yun	U. Mass	94.6	Charting Cluster Mass Build-up using Luminous IR Galaxies
Tyler	Bourke	SAO	72.6	Lonely Cores: Star Formation in Isolation
Guilaine	Lagache	IAS	54.3	IRS observations of a new population of massive high-z galaxies discovered by SWIRE and MAMBO
Chris	Carilli	NRAO	51.5	IRS spectroscopy of a complete, unbiased sample of submm galaxies

** Program was submitted as a *medium* program but accepted with a *small* allocation.

Extrasolar Planet Programs

PI		Institution	Hours	Title
Priority 1				
Heather	Knutson	Harvard	110	Mapping the Atmospheres of the Smallest Transiting Exoplanets
Joseph	Harrington	UCF	60	New Transiting Exoplanets: Targets of Opportunity for Spitzer's Legacy
Drake	Deming	NASA GSFC	32.9	Thermal Emission from the Super-Earth Orbiting GJ 876
Gregory	Laughlin	UC Santa Cruz	32.7	IRAC Observations of Weather and Tidal Heating on Gliese 436 b
Priority 2				
Heather	Knutson	Harvard	33	A Search for Water on a Neptune-Mass Transiting Planet
Bryce	Croll	Toronto	30	As the World Turns: Discrete Observations of a Pseudo-Synchronized Eccentric Transiting Planet
Peter	Wheatley	U. Warwick	19.3	Searching for hot stratospheres of new transiting exoplanets from the WASP survey
Francis	O'Donovan	NASA PD Prog.	13	Probing the Atmosphere of TrES-3, the Shortest Period Transiting Planet Within Spitzer's Reach
Priority 3				
Brad	Hansen	UCLA	38.5	A detailed phase curve for upsilon Andromedae b
Kristen	Menou	Columbia	30.7	Hot Jupiters: Atmospheric Constraints from Repeated Eclipses

331 hours of priority 1 & 2 observations

Proposal Success Rates

Category	Priority 1 & 2		Priority 3	
	Proposals	Requested Hours/$$	Proposals	Requested Hours
Legacy	33% (4 of 12)	19.0%	25% (3 of 12)	18.0%
GO-medium*	24% (13 of 54)	16.4%	9.3% (5 of 54)	8.7%
GO-small **	25% (121 of 478)	20.3%	18% (85 of 478)	17.8%
All GO/Legacy	25% (138 of 544)	19.0%	17% (93 of 544)	15.2%
Extrasolar Planets	47% (8 of 17)	39.7%	12% (2 of 17)	8.3%
Foreign Led	17% (25 of 148)	14.4%	12.8% (19 of 148)	9.3%
Archive	27% (21 of 78)	24.9%		
Theory	19.4% (6 of 31)	20.2%		
All Archive+Theory	25% (27 of 109)	23.4%		

* Several proposals submitted as medium programs were selected with small allocations.
** An additional 57.5 hours was allocated in the small category from Director's Discretionary Time

Institution Success Rates (Observing Proposals)

Institution	Submitted		Priority 1 & 2		Priority 3	
	Proposals	Requested Hours	Proposals	Requested Hours	Proposals	Requested Hours
Arizona	19	607.7	31.6%	20.8%	26.3%	29.0%
Caltech	17	680.2	23.5%	12.8%	17.6%	14.8%
Cornell	7	228.9	28.6%	9.6%	14.3%	14.6%
Durham	9	248.9	22.2%	32.8%	22.2%	19.8%
Harvard-SAO	28	985.2	21.4%	18.4%	17.9%	16.0%
Hawaii	7	115.5	57.1%	46.2%	42.9%	53.8%
IPAC	17	531.8	23.5%	11.4%	17.6%	9.6%
JPL	13	460.2	7.7%	8.3%	15.4%	6.7%
Maryland	5	64.4	60.0%	52.0%	0.0%	0.0%
Michigan	7	106.4	42.9%	7.6%	57.1%	56.0%
NASA GSFC	12	219.4	41.7%	47.6%	0.0%	0.0%
NASA Ames+SETI	10	301.2	40.0%	20.3%	20.0%	10.8%
NOAO	10	382.1	20.0%	15.7%	10.0%	33.9%
SSC	54	1665.0	24.1%	22.4%	24.1%	15.6%
UCF	6	156.1	66.7%	51.8%	16.7%	4.8%
UCLA	14	184.0	21.4%	10.8%	35.7%	49.3%
Virginia	8	177.4	37.5%	23.6%	12.5%	6.7%

Joint Time in Cycle-5

- **NRAO**
  - *6 proposals*
  - *1 selected (3 hrs VLA)*
- **NOAO**
  - *5 proposals*
  - *1 selected (30.9 hrs Gemini)*

Targets of Opportunity

2 high/medium-impact ToO programs selected

- **Gamma-Ray Bursts**
  - **Spitzer- ToO Observations of a Short Gamma Ray Burst**
    - PI: Hurley, Cycle-4 program hasn't triggered
- **Compact Objects**
  - **ToO Observations of TOADS: Finding the Dust in Super-Outburst Eject**
    - PI: D. Hoard, new program

Science Categories of Approved GO Programs

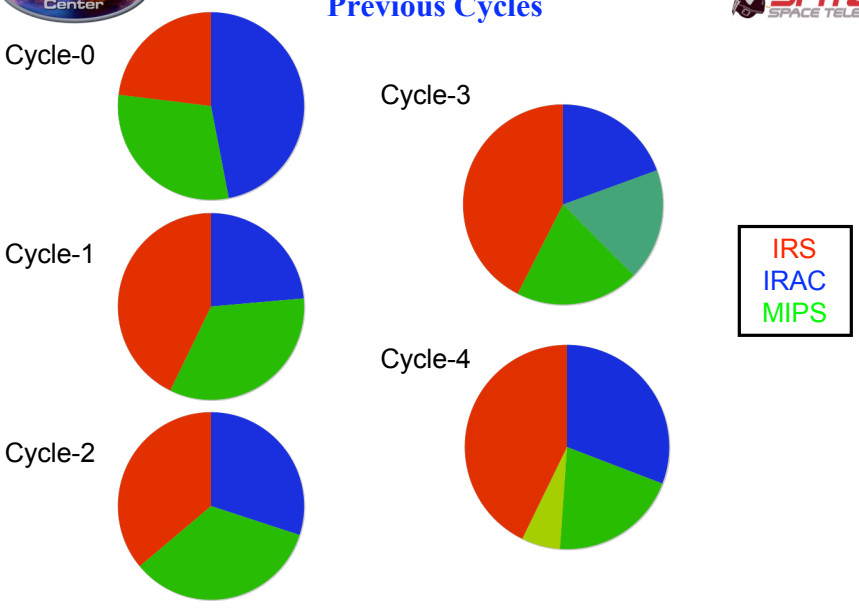
Category	Priority 1 & 2		Priority 3	
	# Props	Hours	# Props	Hours
Distant Universe	40	962	24	1092
Nearby Universe	22	483	19	362
Stars & Interstellar Medium	40	688	26	458
Extrasolar Planets	8	331	2	69
Brown Dwarfs & Circumstellar Disks	19	249	18	235
Our Solar System	9	150	4	65

Complete list of selected programs is posted online @ http://ssc.spitzer.caltech.edu/approvdprog/

Selected Archive/Theory Programs

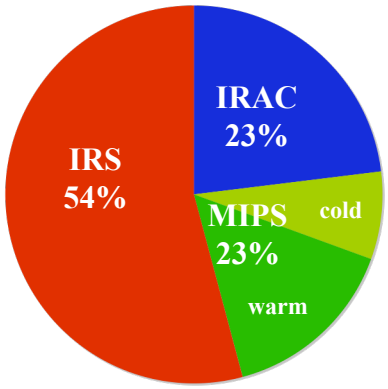
PI		Institution	Award	Title
Archive				
Louis	Allamandola	NASA Ames	$75,000	IR Spectroscopy of PANHs in Dense Clouds
Sydney	Barnes	Lowell Obs.	$75,000	Precise Ages for Debris Disk Stars via Gyrochronology
Michael	Blanton	NYU	$125,000	PRIMUS: stellar mass growth since z=1 with redshifts over 8 sq deg of SWIRE
Nuria	Calvet	Michigan	$125,000	A closer look at protoplanetary disk structure
Megan	Donahue	Michigan St.	$100,000	Star Formation and AGN Feedback in Brightest Cluster Galaxies
Sergio	Fajardo-Acosta	SSC	$75,000	Study of Galaxy Counts & Stellar Excesses in IRS Peak-Up Archival Observations
Eric	Gawiser	Rutgers	$75,000	Comparing the Stellar Populations of Star-forming Galaxies at z=2
Uma	Gorti	NASA Ames	$75,000	Modeling Gas Emission Lines from Circumstellar Disks
Lee	Hartmann	Michigan	$75,000	An archival Spitzer study of protostars
Jeroen	Homan	MIT	$75,000	A comprehensive study of low-mass X-ray binaries in the Spitzer archive
Luke	Keller	Ithaca Coll.	$25,000	PAH emission from Herbig AeBe stars
Charles	Kerton	Iowa State	$75,000	Spitzer Census of Intermediate-Mass Star Forming Regions from Galactic Surveys
Elizabeth	Lada	Florida	$100,000	Evolution of Star Formation in the Rosette Molecular Cloud
Barry	Madore	OCIW	$25,000	Mid-IR Cepheid Distance Scale
Paul	Martini	Ohio State	$100,000	The Dust - AGN Connection in Early-Type Galaxies
Stacy	McGaugh	Maryland	$25,000	Star Formation and the Tully-Fisher Relation
C. C.	Ngeow	Illinois U-C	$25,000	Extragalactic Cepheids from Spitzer Archival Data
Roberta	Paladini	SSC	$50,000	Spitzer characterization of dust grains in regions of anomalous emission
David	Trilling	Arizona	$50,000	The Spitzer Asteroid Catalog III: The Pan-STARRS 1 era
Gillian	Wilson	UC Riverside	$100,000	Hunting for z'-dropout z > 6.5 Quasars in the SWIRE Legacy Fields
Scott	Wolk	SAO	$75,000	Archival Survey of Orion A with Spitzer, XMM-Newton and Chandra
Theory				
Nicholas	Abel	U. Cincinnati	$50,000	X-ray Effects on Spitzer IRS Emission-Line Diagnostics
Ara	Chutjian	JPL	$75,000	Polyatomic Molecule Synth. on Dust Grain Analogues Using Superthermal Atoms
Jonathan	Fortney	UC Santa Cruz	$125,000	Exploring Hot Neptune Atmospheres
S.	Gudipati	JPL	$125,000	Identification of PAHs in Spitzer/IRS Spectra of the Icy Environments of YSOs
Mark	Krumholz	UC Santa Cruz	$125,000	Simulating Star Formation in Space and Time
Kentaro	Nagamine	UNLV	$50,000	Infrared Properties of High-z Galaxies

Instrument Usage Previous Cycles



Instrument Usage
Cycle-5

Priority 1 & 2



Priority 3