



Astrophysics
Division

Astrophysics Research Programs

NASA Advisory Council Astrophysics Subcommittee

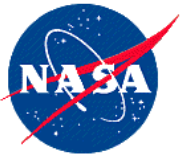
19 October 2011

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Astrophysics Division



Statistics for ROSES competitions

	Due Date	Notification	Days	Rec'd	Selected	Success
			from due date			
ROSES-2011						
Roman Technology Fellowships	18-Nov-11		-30	21	NOIs	
Swift Guest Investigator -- Cycle 8	28-Sep-11		21	151		
Astrophysics Theory	3-Jun-11		138	197	→	
Origins of Solar Systems	27-May-11	7-Oct-11	133	36	→	3 8%
Astrophysics Data Analysis	20-May-11	29-Sep-11	132	278	↑↑	37 13%
ROSES-2010						
Strategic Astrophysics Technology	25-Mar-11	31-Aug-11	159	56	↑↑	14 25%
Astrophysics Research and Analysis	25-Mar-11	31-Aug-11	159	166	↑↑	29 17%
Elements with NEW STARTS IN FY12			weighted mean =	143	536	83 15%
Kepler Participating Scientists	11-Feb-11	17-Jun-11	126	30	12	40%
Fermi Guest Investigator -- Cycle 4	21-Jan-11	28-Apr-11	97	210	87	41%
Euclid Science Teams	20-Dec-10	15-Feb-11	57	2	0	
Kepler Guest Observer - Cycle 3	17-Dec-10	25-Mar-11	98	40	22	55%
Suzaku Guest Observer -- Cycle 6	19-Nov-10	28-Feb-11	101	91	40	44%
Swift Guest Investigator -- Cycle 7	29-Sep-10	21-Dec-10	83	182	61	34%
Astrophysics Theory	4-Jun-10	21-Oct-10	139	193	33	17%
Origins of Solar Systems	28-May-10	19-Oct-10	144	36	6	17%
Astrophysics Data Analysis	14-May-10	2-Sep-10	111	186	63	34%
ROSES-2009						
Astrophysics Research and Analysis	26-Mar-10	5-Aug-10	132	143	37	26%
Elements with NEW STARTS IN FY11			weighted mean =	143	1113	361 32%



Research Program Funding History

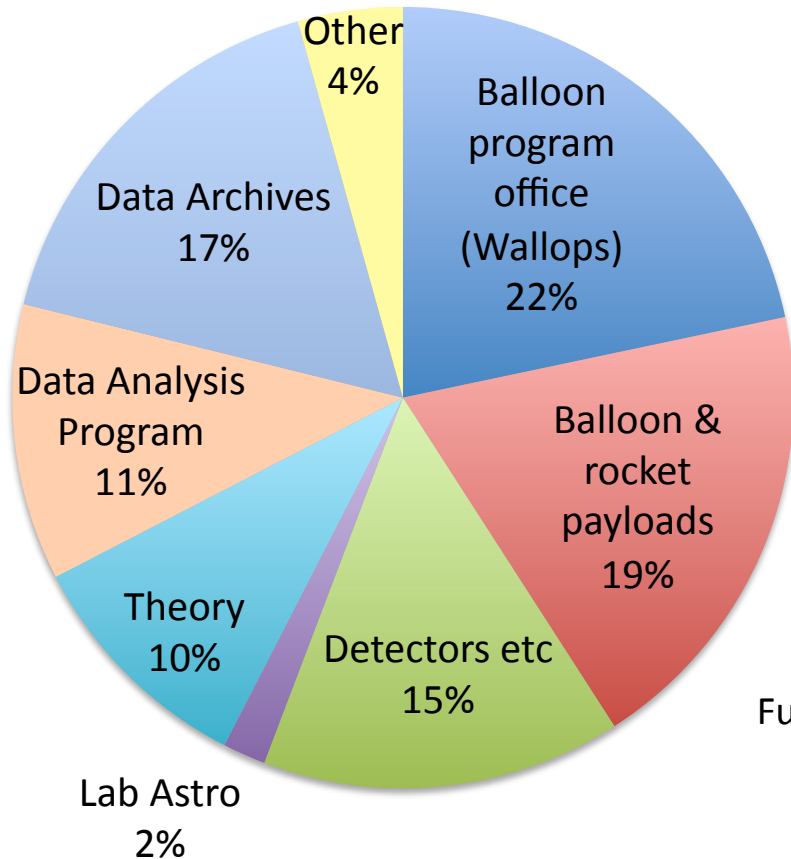
	FY04 Final Released	FY05 Final Released	FY06 Final Released	FY07 Final Released	FY08 Final Released	FY09 Final Released	FY10 Final Released	FY11 Final Released
Particle Astro	\$ 8,248,000	\$ 7,670,887	\$ 8,543,526	\$ 7,631,233	\$ 6,671,579	\$ 8,201,428	\$ 8,259,840	\$ 8,243,029
High Energy	\$14,548,000	\$13,693,202	\$14,779,227	\$12,781,980	\$12,405,649	\$13,886,226	\$14,110,293	\$13,904,424
UV/Opt/IR/ Sub-mm	\$20,409,000	\$18,742,126	\$21,850,678	\$17,442,434	\$19,094,421	\$22,353,194	\$21,534,307	\$21,300,287
Other	\$ 1,019,000	\$ 854,085	\$ 337,664	\$ 394,000	\$ 593,764	\$ 669,550	\$ 672,677	\$ 642,000
APRA Total	\$44,224,000	\$40,960,300	\$45,511,095	\$38,249,647	\$38,765,413	\$45,110,398	\$44,577,117	\$44,089,740
Orig Solar Systems	\$ 4,209,000	\$ 3,871,613	\$ 4,149,617	\$ 3,673,163	\$ 2,965,064	\$ 2,999,535	\$ 2,807,315	\$ 2,444,556
Astro Theory Program	\$ 7,860,000	\$ 7,363,285	\$10,245,457	\$10,227,007	\$11,695,838	\$11,890,067	\$12,261,568	\$12,576,824
R&A (399131)	\$56,293,000	\$52,195,198	\$59,906,169	\$52,149,817	\$53,426,315	\$60,000,000	\$59,646,000	\$59,111,120
ADAP/LTSA	\$16,986,000	\$15,700,000	\$15,188,960	\$12,640,683	\$12,013,000	\$14,383,900	\$13,258,126	\$14,132,000
Core R&A	\$73,279,000	\$67,895,198	\$75,095,129	\$64,790,500	\$65,439,315	\$74,383,900	\$72,904,126	\$73,243,120
TPF/FS Beyond Einstein FS	\$ 2,000,000	\$ 2,000,000		(Foundation Science; now in ATP)				
ASMCS (399131)	\$ 4,000,000	\$ 3,000,000	\$ 2,000,000		\$ 3,451,685	\$ 442,100		
PCOS SR&T		Mission concept studies					\$ 967,609	\$ 184,000
TOTAL R&A	\$79,279,000	\$72,895,198	\$77,095,129	\$64,790,500	\$68,891,000	\$74,826,000	\$73,871,735	\$73,427,120
		\$7M R&A cut	smaller R&A cut	15% R&A cut	Partial recovery	More R&A recovery	flat	flat

The Research Program budget has been roughly flat since FY 2009

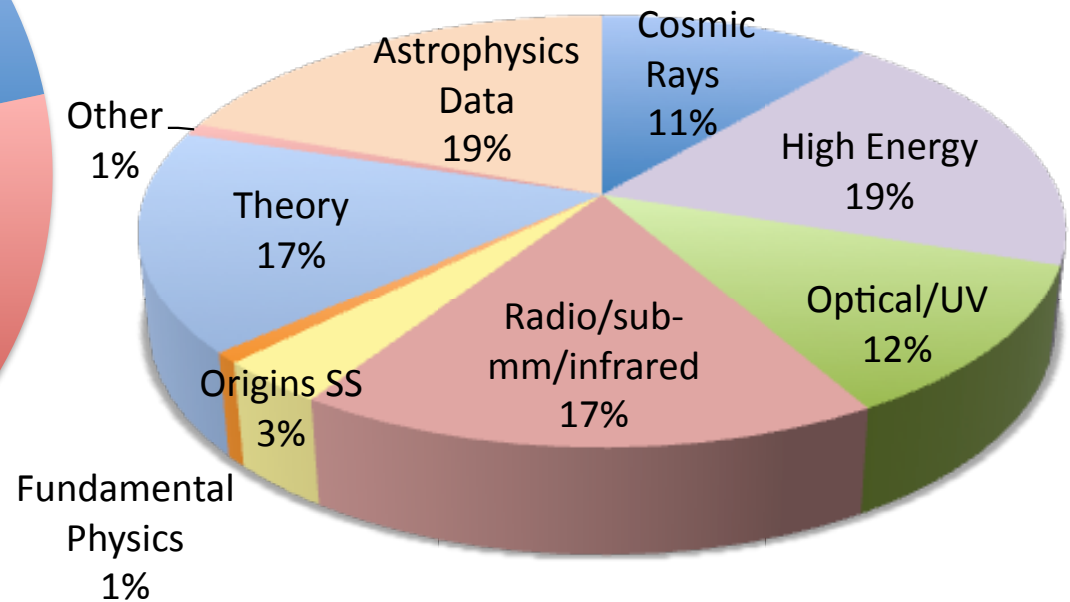


NASA Astrophysics Research Program FY11

Astrophysics Research: \$124M



Research awards through ROSES: \$73M





Nancy Grace Roman Technology Fellowships

first proposals due 18 November 2011

These fellowships aim to

... give early career researchers the opportunity to develop the skills to lead astrophysics flight instruments/projects and become principal investigators (PIs) of future astrophysics missions;

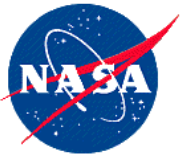
... develop innovative technologies that have the potential to enable major scientific breakthroughs;

... foster new talent by putting early-career instrument builders on a trajectory towards long-term positions.

Early-career (<7 years since PhD) PIs in non-tenured positions (postdoc, tenure-track, etc.) may propose a **one-year concept study** to generate detailed plans and commitments for a **4-year development effort**.

Reports from concept studies are **peer-reviewed to select those that will continue to development**; institutional commitments to lab space and other facilities are required.

ROSES-11: we expect to award funding for 3-6 concept studies.



Astrophysics Research & Analysis and Suborbital Payloads (budgets notional)

(\$ in thousands, does not include civil servant labor)

	PBR FY11	PBR FY12	FY13	FY14	FY15	FY16
Research & Analysis	\$57,881	\$64,312	\$82,836	\$83,932	\$85,105	\$87,995
Suborbital payloads	21,964	23,779	29,604	30,803	30,992	31,958
Lab Astrophysics	3,193	3,544	4,692	4,692	4,957	5,016
Detectors, Supporting Technology	20,751	22,966	26,657	27,690	27,152	27,892
Astrophysics Theory Program	11,805	12,723	15,178	15,274	15,751	15,982
Theory and Computation Networks		500	3,000	3,077	3,127	4,000
Technology Fellows		800	2,705	2,396	3,126	3,147
Astrophysics Data Analysis	\$13,932	\$16,957	\$18,451	\$18,937	\$19,466	\$19,832
Large Suborbital (MO)		2,000	8,000	9,000	9,000	9,000
R&A Suborbital payloads	21,964	23,779	29,304	30,803	30,992	31,958
Total Suborbital Payloads		\$25,779	\$37,304	\$39,803	\$39,992	\$40,958

This is the same chart that you saw at the February meeting