PCOS SAT Historical Listing									
Solicitation Year	**Technology Development Title**	**Principal Investigator**	**Org**	**Start Year, Duration**	**TRL Entry**	**TRL Current**	**TRL Exit**	**Science Area**	**Tech Area**
SAT2010	Antenna-Coupled Superconducting Detectors for Cosmic Microwave Background Polarimetry	Jamie Bock	JPL	FY2012, 2 years	3	-	4	CMB	Detector
SAT2010	Development of Fabrication Process for Critical-Angle X ray Transmission Gratings	Mark Schattenburg	MIT	FY2012, 3 years	3	-	3	X ray	Optics
SAT2010	Directly-Deposited Blocking Filters for Imaging X ray Detectors: Technology Development for the International X ray Observatory	Mark Bautz	MIT	FY2012, 4 years	5	5	-	X ray	Detector
SAT2010	Off-plane Grating Arrays for Future Missions	Randall McEntaffer	U of Iowa	FY2012, 2 years	3	-	4	X ray	Optics
SAT2010	Development of Moderate Angular Resolution Full Shell Electroplated Metal Grazing Incidence X ray Optics	Paul Reid	SAO	FY2012, 3 years	3	-	3	X ray	Optics
SAT2011	Colloid Microthruster Propellant Feed System for Gravity Wave Astrophysics Missions	John Ziemer	JPL	FY2013, 2 years	3	-	5	GW	Propulsion
SAT2011	Advanced Laser Frequency Stabilization	John Lipa	Stanford	FY2013, 3 years	3	-	3	GW	Laser
SAT2011	Telescope for a Space-based Gravitational Wave Mission	Jeffrey Livas	GSFC	FY2013, 3 years	3	-	3	GW	Telescope
SAT2011	Demonstrating Enabling Technologies for the High-Resolution Imaging Spectrometer of the Next NASA X ray Astronomy Mission	Caroline Kilbourne	GSFC	FY2013, 3 years	4	-	4	X ray	Detector
SAT2011	Next Generation X ray Optics: High Resolution, Light Weight, and Low Cost	William Zhang	GSFC	FY2013, 2 years	3	-	5	X ray	Optics
SAT2012	Advanced Antenna-Coupled Superconducting Detector Arrays for CMB Polarimetry	Jamie Bock	JPL	FY2014, 2 years	3	-	3	CMB	Detector
SAT2012	Phase Measurement System Development for Interferometric Gravitational Wave Detectors	William Klipstein	JPL	FY2014, 3 years	4	4	-	GW	Electronics
SAT2012	Demonstration of a TRL 5 Laser System for eLISA	Jordan Camp	GSFC	FY2014, 2 years	3	3	-	GW	Laser
SAT2013	Technology Development for an AC-Multiplexed Calorimeter for ATHENA	Joel Ullom	NIST	FY2015, 2 years	3	3	-	X ray	Detector
SAT2013	Fast Event Recognition for the ATHENA Wide Field Imager	David Burrows	PSU	FY2015, 2 years	3	3	-	X ray	Detector
SAT2013	Reflection Grating Modules: Alignment and Testing	Randy McEntaffer	U. of Iowa	FY2015, 2 years	3	-	4	X ray	Optics
SAT2013	Development of 0.5 Arc-second Adjustable Grazing Incidence X ray Mirrors for the SMART-X Mission Concept	Paul Reid	SAO	FY2015, 3 years	2	-	3	X ray	Optics
SAT2013	Affordable and Lightweight High-Resolution Astronomical X ray Optics	William Zhang	GSFC	FY2015, 2 years	3	-	5	X ray	Optics
SAT2013	Advanced Packaging for Critical Angle X ray Transmission Gratings	Mark Schattenburg	MIT	FY2015, 2 years	3	-	4	X ray	Optics
SAT2014	High Efficiency Feedhorn-Coupled TES-based Detectors for CMB Polarization Measurements	Edward Wollack	GSFC	FY2016, 2 years	3	3	-	CMB	Detector
SAT2014	Telescope Dimensional Stability Study for a Space-based Gravitational Wave Mission	Jeffrey Livas	GSFC	FY2016, 2 years	3	3	-	GW	Telescope
SAT2014	Superconducting Antenna-Coupled Detectors and Readouts for Space-Borne CMB Polarimetry	Jamie Bock	JPL	FY2016, 2 years	3	3	-	CMB	Detector
SAT2015	Development of a Critical Angle Transmission Grating Spectrometer	Mark Schattenburg	MIT	FY2017, 2 years	4	4	-	X-ray	Optics
SAT2015	High-Resolution and Lightweight X-ray Optics for the X-Ray Surveyor	William Zhang	GSFC	FY2017, 2 years	3	3	-	X-ray	Optics
SAT2015	Phase Measurement System for Gravitational Wave Detection	William Klipstein	JPL	FY2017, 2 years	4	4	-	GW	Electronics
SAT2015	Hybrid lightweight X-ray optics for half arcsecond imaging	Paul Reid	SAO	FY2017, 2 years	2	2	-	X-ray	Optics

Note: Durations listed include approved no cost extensions if applicable.