

All Studies listed by Name, Phase, and Title		
Name	Phase	Proposal Title
Bacon, David P	I	Adaptive Observation Strategies for Advanced Weather Prediction
Bekey, Ivan	I	Assessment of the Feasibility of Extremely Large, Structureless Optical Telescopes and Arrays
Bogar, Thomas J	I	Hypersonic Airplane Space Tether Orbital Launch System
Boston, Penelope J	I	Scientific Exploration and Human Utilization of Subsurface Extraterrestrial Environments: A Feasibility Assessment of Strategies, Technologies and Test Beds
Boston, Penelope J	II	System Feasibility Demonstrations of Caves and Subsurface Constructs for Mars Habitation and Scientific Exploration
Brown, Christopher S	I	Programmable Plants: Development of an In Planta System for the Remote Monitoring and Control of Plant Function for Life Support
Campbell, Mark E	I	Intelligent Satellite Teams for Space Systems
Carroll, Joseph	I	Space Transport Development using Orbital Debris
Cash, Webster	I	X-ray Interferometry
Cash, Webster	II	X-ray Interferometry
Caulfield, H John	I	3D Viewing of Images on the Basis of 2D Images
Charania, A. C.	I	Networks on the Edge of Forever: Meteor Burst (MB) Communication Networks on Mars
Chirikjian, Gregory S.	I	An Architecture for Unmanned Self-Replicating Lunar Factories
Christensen, Cindy	I	Ultralight Solar Sails for Interstellar Travel
Colozza, Anthony	I	Solid State Aircraft
Colozza, Anthony	I	Planetary Exploration Using Biomimetics
Colozza, Anthony	II	Solid State Aircraft
Colozza, Anthony	II	Planetary Exploration Using Biomimetics
Cybenko, George	I	A Novel Information Management Architecture for Maintaining Long-Duration Space Crews
Dubowsky, Steven	I	Self-Transforming Robotic Planetary Explorers
Dubowsky, Steven	I	Microbots for Large-Scale Planetary Surface and Subsurface Exploration
Dubowsky, Steven	II	Self-Transforming Robotic Planetary Explorers
Edwards, Bradley Carl	I	The Space Elevator
Edwards, Bradley Carl	II	The Space Elevator
England, Christopher	I	Mars Atmosphere Resource Recovery System (MARRS)
Farritor, Shane	I	A Modular Robotic System to Support the Surface Operations of Human Mars Exploration
Fisch, Nathaniel J.	I	Optimal Navigation in a Plasma Medium
Gold, Robert E	I	SHIELD: A Comprehensive Earth Protection System
Gorenstein, Paul	I	Ultra high Throughput X-Ray Observatory With a New Mission Architecture
Gorenstein, Paul P	II	An Ultra High Throughput X-Ray Astronomy Observatory With A New Mission Architecture - Phase II
Grant, John	II	Hypersonic Airplane Space Tether Orbital Launch (HASTOL) Study - Phase II
Hawk, Clark W	I	Plasma Pulsed Power Generator

Hodgson, Edward	I	A Chameleon Suit to Liberate Human Exploration of Space Environments
Hodgson, Edward	II	A Chameleon Suit to Liberate Human Exploration of Space Environments
Hoffman, Ross N	I	Controlling the Global Weather
Hoffman, Ross N	II	Controlling the Global Weather
Hoskins, Paul D	I	An Advanced Counter-Rotating Disk Wing Aircraft Concept
Howard, Timothy L	I	Planetary-Scale Astronomical Bench
Howe, Steven D	I	Antimatter Driven Sail for Deep Space Missions
Howe, Steven D.	I	Micro Asteroid Prospector Powered by Energetic Radioisotopes: MAPPER
Howe, Steven D	I	Enabling Exploration of Deep Space: High Density Storage of Antimatter
Howe, Steven D.	II	Antimatter Driven Sail for Deep Space Missions
Hoyt, Robert P	I	Tether Transport System for LEO-MEO-GEO-Lunar Traffic
Hoyt, Robert P	II	Moon & Mars Orbiting Spinning Tether Transport (MMOSTT)
Ignatiev, Alex	I	New Architecture for Space Solar Power Systems: Fabrication of Silicon Solar Cells Using In-Situ Resources
Jacobs, Ron	I	Biologically Inspired Robot for Space Operations
Kammash, Terry	I	Ultrafast Laser-Driven Plasma for Space Propulsion
Kammash, Terry	I	Antiproton-Driven, Magnetically Insulated Inertial Fusion (MICF)
Kammash, Terry	II	Ultrafast Laser-Driven Plasma for Space Propulsion
Kare, Jordin T.	I	Modular Laser Launch Architecture: Analysis and Beam Module Design
Kare, Jordin T	I	High-Acceleration Micro-Scale Laser Sails for Interstellar Propulsion
Keith, Andy	II	Methodology for the Study of Autonomous VTOL Scalable Logistics Architecture
King, Lyon B	I	Propellantless Control of Spacecraft Swarms using Coulomb Forces
Komerath, N	II	Tailored Force Fields: Phase 2
Komerath, Narayanan M	I	Tailored Force Fields for Space-Based Construction: Key to a Space-Based Economy
Kroo, Ilan	I	Meso-Scale Flight Vehicle for Atmospheric Sensing
Kroo, Ilan	II	The Mesicopter: A Meso-Scale Flight Vehicle
LaForge, Larry E	I	Architectures and Algorithms for Self-Healing Autonomous Spacecraft
LaPointe, Michael R	I	Formation Flying with Shepherd Satellites
LaPointe, Michael R	I	Primary Propulsion for Piloted Deep Space Exploration
Landis, Geoffrey A	I	Advanced Solar and Laser Pushed Lightsail Concepts
Lipson, Hod	I	Autonomous Self-Extending Machines for Accelerating Space Exploration
Lomax, Terri L	I	A Flexible Architecture for Plant Functional Genomics in Space Environments
Lomax, Terri L	II	Developing a Plant Genetic Assessment and Control System for Space Environments
Maclay, Jordan	I	Feasibility of Communications Using Quantum Correlations
Maise, George	I	Exploration of Jovian Atmosphere Using Nuclear Ramjet Flyer
Maise, George	II	Exploration of Jovian Atmosphere Using Nuclear Ramjet Flyer
Manobianco, John	I	Global Environmental MEMS Sensors (GEMS): A Revolutionary Observing System for the 21st Century
Manobianco, John	II	Global Environmental MEMS Sensors (GEMS): A Revolutionary Observing System for the 21st Century
Marchese, Anthony J	I	The Black Light Rocket (BLR) Engine
Mavroidis, Constantinos	I	Protein Based Nano-Machines for Space Applications
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Constantinos	II	Bio-Nano-Machines for Space Applications
McCormack, Elizabeth	I	Investigation of the Feasibility of Laser Trapped Mirrors in Space
McNutt, Ralph L	I	A Realistic Interstellar Explorer
McNutt, Ralph L	II	A Realistic Interstellar Explorer
Miller, David W	I	Electromagnetic Formation Flight (EMFF)
Miller, David W.	II	Electromagnetic Formation Flight (EMFF)
Molnar, Peter	I	Self-Organized Navigation Control for Manned and Unmanned Vehicles in Space Colonies
Montemagno, Carlo D	I	Directed Application of Nanobiotechnology for the Development of Autonomous Biobots
Newman, Dava J	I	Astronaut Bio-Suit System for Exploration Class Missions
Newman, Dava J	II	Astronaut Bio-Suit System for Exploration Class Missions
Nock, Kerry T	I	Cyclical Visits to Mars via Astronaut Hotels
Nock, Kerry T	I	Global Constellation of Stratospheric Scientific Platforms
Nock, Kerry T.	II	Cyclical Visits to Mars via Astronaut Hotels
Nock, Kerry T	II	Global Constellation of Stratospheric Scientific Platforms
O'Handley, Douglas	I	System Architecture Development for a Self-Sustaining Lunar Colony
Ohi, Seigo	I	The Hematopoietic Stem Cell Therapy for Exploration of Space
Olds, John R.	I	The League of Extraordinary Machines: A Rapid and Scalable Approach to Planetary Defense Against Asteroid Impactors
Omidi, Nick	I	High Speed Interplanetary Tug/Cocoon Vehicles (HITVs)
Palisoc, Arthur L	I	Large Telescope Using Holographically Corrected Membranes
Paniagua, John	I	Europa Sample Return Mission Utilizing High Specific Impulse Propulsion Refueled with Indigenous Resources
Pankine, Alexey A	I	Planetary Science from Directed Aerial Robot Explorers
Pankine, Alexey	II	Sailing the Planets: Science from Directed Aerial Robotic Explorers
Paxton, Larry J	I	Global Observations and Alerts from Lagrange-Point, Pole-Sitter, and Geosynchronous Orbits (GOAL&GO)
Powell, James	I	Development of Self-Sustaining Mars Colonies Utilizing the North Polar Cap and the Martian Atmosphere
Rice, Eric E	I	Development of Lunar Ice Recovery System Architecture
Rice, Eric E	I	Advanced System Concept for Total ISRU-Based Propulsion & Power Systems for Unmanned & Manned Mars Exploration
Rice, Eric E	II	Advanced System Concept for Total ISRU-Based Propulsion & Power Systems for Unmanned and Manned Mars Exploration
Rose, John R	I	Achieving Comprehensive Mission Robustness
Sarkar, Nilanjan	I	A Novel Interface System for Seamlessly Integrating Human-Robot Cooperative Activities in Space
Seward, Clint C	I	Low Cost Space Transportation Using Electron Spiral Toroid (EST) Propulsion
Slough, John	I	The Plasma Magnet
Slough, John	I	Rapid Manned Mars Mission With a Propagating Magnetic Wave Plasma Accelerator
Slough, John	II	The Plasma Magnet
Soroushian, Parviz	I	Inherently Adaptive Structural Systems
Soroushian, Parviz	II	Inherently Adaptive Structural Systems
Stancil, Charles M	I	Electric Toroid Rotor Technology Development
Starkman, Glenn	I	Ultrahigh Resolution X-Ray Astronomy using Steerable Occulting Satellites

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Todd, Paul	I	Robotic Lunar Ecopoiesis Test Bed
Todd, Paul	II	Robotic Lunar Ecopoiesis Test Bed
Toth-Fejel, Tihamer	I	Modeling Kinematic Cellular Automata: An Approach to Self-Replication
Tyll, Jason	I	Environmentally-Neutral Aircraft Propulsion Using Low-Temperature Plasmas
Ulmer, M. P.	I	Self Assembly of Optical Structures in Space
Van Buiten, Chris	I	Autonomous VTOL Scalable Logistics Architecture
Vaneck, Thomas W	I	A System of Mesoscale Biomimetic Roboswimmers for Exploration and Search of Life on Europa
Wertz, James R.	I	High Resolution Structureless Telescope
Wettergreen, David	I	Planetary Circumnavigation
Winglee, Robert M	I	Mini-Magnetospheric Plasma Propulsion
Winglee, Robert M	II	Mini-Magnetospheric Plasma Propulsion, M2P2
Woolf, Neville J	I	Very Large Optics for the Study of Extrasolar Terrestrial Planets
Woolf, Neville J	II	Very Large Optics for the Study of Extrasolar Terrestrial Planets
Zhou, Guoqing	I	Architecture of Intelligent Earth Observation Satellite for Common Users in 2010-2050
Zubrin, Robert	I	The Magnetic Sail