

JPL 2018 Research Poster Conference Exhibitors (001-132)

001	Exploring Fundamental Physics with Multiple Cosmological Observables and Data Sets - <i>Huff, Eric M.</i>	044	The JPL Fire Danger Assessment Systems (FDAS): Using Satellite Observations to Map Global Wildfire Risk - <i>Reager, John T.</i>	090	MOSAIC: Mars On-Site Shared Analysis, Information, and Computing - <i>Vander Hook, Joshua</i>
002	Using [NII] to Improve [CII] and CO Luminosity Models in Deriving Cosmic Structure Over Time - <i>Langer, William D.</i>	045	Flow of Water, Carbon, and Sediment within the Land-Sea Continuum - <i>Simard, Marc</i>	091	Responsive Onboard Science for the Europa Clipper Mission - <i>Wagstaff, Kiri L.</i>
003	Searching for Neutron Stars in the Dense Stellar Cluster at the Center of the Galaxy - <i>Majid, Walid A.</i>	046	Solar Atmospheric Dynamics from Doppler and Magnetic Imaging - <i>Murphy, Neil</i>	092	An Innovative Data-Driven Methodology for Computational Shock Response Prediction - <i>Derkevorkian, Armen</i>
004	Setting the WFIRST Microlensing Fields: Analysis of the UKIRT Precursor Survey - <i>Bryden, Geoffrey</i>	047	The Development of Magnetosonic Shocks in Space - <i>Tsurutani, Bruce T.</i>	093	Analytical Methods for Solving the Ballistic Cyber Problem - <i>Hernandez-Doran, Sonia</i>
005	Science with the North America Array: Linking Ground and Space Astronomy - <i>Bryden, Geoffrey</i>	048	Ocean Worlds - <i>Hand, Kevin P.</i>	094	Interdisciplinary Data Environment for Exoplanet Research - <i>Jewell, Jeffrey B.</i>
006	Intensity Mapping of Cosmic Structures - <i>Chang, Tzu-Ching</i>	049	Experimental Investigation of Vapor Pressure Isotope Effects Relevant to Surface and Atmospheric Processes on Titan - <i>Hofmann, Amy E.</i>	095	Preparing for the Deluge: Joint Processing and Analysis of Multi-Probe Dark Energy Data in the Coming Decade - <i>Rhodes, Jason D.</i>
007	HAWC+ G.T.O. Program to Characterize Magnetic Fields in Nearby Interstellar Clouds - <i>Dowell, Charles D.</i>	050	Investigation of the Jovian Radiation Belts Using JADE's Background Noise - <i>Jun, Insoo</i>	096	Trusted Data Analytics: Uncertainty Quantification - <i>Turmon, Michael J.</i>
008	Cosmology with the High and Low Redshift Universe - <i>Dore, Olivier P.</i>	051	Investigating New Evidence of Fluid Activities in Martian Meteorites - <i>Liu, Yang</i>	097	Assurance of Model-Based Fault Diagnosis Techniques - <i>Chung, Seung H.</i>
009	Laboratory Spectral Simulations of Habitable Exoplanet Atmospheres - <i>Gudipati, Murthy S.</i>	052	Support for NEOWISE Reactivation Science - <i>Mainzer, Amanda K.</i>	098	Networked Constellation Software Technologies - <i>Chien, Steve A.</i>
010	The Occurrence Rates of Close-In Exoplanets as a Function of Stellar Age - <i>Mamajek, Eric E.</i>	053	Spotting Active Comets in Wide-Field Survey Data - <i>Masiero, Joseph R.</i>	099	Validation of Flight and Ground Autonomous Scheduling - <i>Chien, Steve A.</i>
011	Terrestrial Planet Environments — Probing Warm Debris; Investigating a Cold Origin? - <i>Morales, Farisa Y.</i>	054	Student-Sourcing Innovation - A Pilot Using Next Mars Orbiter (NeMO) Secondary Payloads - <i>Oaida, Bogdan</i>	100	Smart Software for Programming and Monitoring Autonomous Systems - <i>Havelund, Klaus</i>
012	Radiative Transfer and Modeling Activities in Support of the Exoplanetary Science Initiative - <i>Natraj, Vijay</i>	055	Planetary Interior Structure and Dynamics: New Directions for Research at JPL - <i>Panning, Mark P.</i>	101	Prototype Reverse-Operation Differential Thermal Expansion Thermal Switch - <i>Bugby, David C.</i>
013	Laboratory Studies of Chemical Kinetics on Extrasolar Planets - <i>Percival, Carl J.</i>	056	Optimizing Planetary Surface Thermal Model Algorithm (KRC) Interface Performances - <i>Piqueux, Sylvain</i>	102	Adaptive Ocean Front Tracking for AUV In-Situ Sensing System - <i>Chu, Selina</i>
014	Bridging the Gap: Observations and Theory of Star Formation Meet on Large and Small Scales - <i>Pineda Galvez, Jorge Luis</i>	057	Optimized Retrievals of Cloudy Atmospheres (ORCA) on Brown Dwarfs - <i>Sanghavi, Suniti V.</i>	103	A Pyroelectric Instrument for Elemental Lithochemistry - <i>Flannery, David T.</i>
015	Combining CMB (ACTPol, Stage IV) and Weak Lensing Data (HSC, Euclid, WFIRST, LSST) - <i>Rhodes, Jason D.</i>	058	Correlating Ancient Sedimentary Environments in the Rock Record of Early Mars - <i>Stack Morgan, Kathryn M.</i>	104	HiMAP (High-Resolution Imaging Multi-Species Atmospheric Profiler) for Air Quality - <i>Fu, Dejian</i>
016	Fast Bayesian Method for Direct Detection of Extrasolar Planets: PowellSnakes-III - <i>Rocha, Graca M.</i>	059	Science Drivers for Icy Moon Seismology - <i>Vance, Steven D.</i>	105	Crosscutting Spectrometer Advancement: High Throughput, Multi-Octave Imaging Spectrometer - <i>Green, Robert O.</i>
017	A Bayesian Framework to Improve Exoplanets Detection Via the Radial Velocity Technique - <i>Rocha, Graca M.</i>	060	Agile, Rapid Response for Interstellar Visitor Exploration (ARRIVE) - <i>Weinstein-Weiss, Stacy S.</i>	106	Development of Thin Film Colossal Magnetoresistance (CMR) Electronic Devices Using Electron Paramagnetic Resonance as a Process Guide - <i>Kim, Soon Sam</i>
018	ESI Postdoc Proposal - <i>Stapelheldt, Karl R.</i>	061	Atmospheric Mass Transport on Mars: Future Gravity Mission Accuracy Requirements - <i>Bills, Bruce G.</i>	107	Spatial Power Combining Amplifier (SPCA) for W-Band Radar in Earth and Planetary Science - <i>Samoska, Lorene A.</i>
019	Multi-Mission, Multi-Instrument Data Analysis Software for Exoplanet Exploration - <i>Swain, Mark R.</i>	062	Near Surface Wind on Mars: Aeolian Geomorphology and Erosion Rates on the Micro, Meso, and Macro Scales - <i>Kerber, Laura A.</i>	108	Correlators for Synthetic Apertures in Space - <i>Soriano, Melissa A.</i>
020	Planet Population Synthesis: Origins of the Observed Population of Rocky Exoplanets - <i>Turner, Neal J.</i>	063	Extreme Weather Initiative - <i>Posselt, Derek J.</i>	109	Extremely Compact Plume Detector and Tracking Sensor - <i>Tang, Adrian J.</i>
021	Sampling Primitive Solar System Bodies Via Zodiacal Dust - <i>Turner, Neal J.</i>	064	Phosphorus Chemistry on Early and Present Day Mars - <i>Barge, Laura M.</i>	110	Investigation of an Alternative Electro Caloric Cooling System - <i>West, William C.</i>
022	Gravitational Wave Astronomy - Opening New Windows - <i>Vallisneri, Michele</i>	065	Planetary Habitability Test Beds - <i>Barge, Laura M.</i>	111	Direct Detection of Dark Energy Through Precision Local Measurements in Space - <i>Yu, Nan</i>
023	Solid Earth and Natural Hazards (SE/NH): Linking Solid Earth and Climate - <i>Adhikari, Surendra</i>	066	Science Case for Constellation Networks - <i>Castillo-Rogez, Julie C.</i>	112	Earth Science at Multiple Frequencies: More than the Sum of its Parts - <i>Bloom, Alexis A.</i>
024	iMAP (Innovative Method for Aerosol Profiling) for Air Quality Studies - <i>Jiang, Jonathan H.</i>	067	Integrated Multi-Scale Spatial and Spectral Observations of Mars Relevant Material in Support of Future Mars Missions - <i>Fraeman, Abigail A.</i>	113	Next Generation Active/Passive Sensors for Observing Storm-Scale Processes from Space - <i>Brown, Shannon T.</i>
025	Strategic Advances in Air Quality Research and Technology Development - <i>Jiang, Jonathan H.</i>	068	Laboratory Studies of Lunar Polar Cold Traps - <i>Noell, Aaron C.</i>	114	Interpreting Time Sequences of Microwave Measurements Over Clouds from a Convoy of Identical Scanning Radars and/or Radiometers, in Terms of the Underlying Dynamics - <i>Haddad, Ziad S.</i>
026	Developing a Solid Earth-Hydrosphere Modeling Infrastructure for Science and Mission Formulation - <i>Lundgren, Paul R.</i>	069	Hydrothermal Green Rust as the Metabolic and Information Engine at Life's Emergence - <i>Russell, Michael J.</i>	115	Multi-Functional 3-D Printed Customized Luneburg Lens Antennas for Future Earth Science Applications - <i>Hodges, Richard E.</i>
027	Laboratory Studies of the Heterogeneous Uptake of Methane in the Martian Atmosphere - <i>Sander, Stanley P.</i>	070	Astrobiogeochemistry, Habitability, and Returned Sample Science - <i>Williford, Kenneth H.</i>	116	Cold Water Field-based Salinity Measurements Over the Arctic Sea by Enabling PALS Spare Instrument Modification - <i>Misra, Sidharth</i>
028	Development and Validation of New Unified Parameterizations for Cloud and Boundary Layer Dynamics - <i>Teixeira, Joao P.</i>	071	Constraining Preservation, Chemistry and Metabolisms During Climate Extremes at the Dawn of Complex Life - <i>Williford, Kenneth H.</i>	117	Developing Multi-Instrument Approaches to Observing Terrestrial Ecosystems and the Carbon Cycle - <i>Schimmel, David S.</i>
029	Drought Tipping Points: Can Satellite Remote Sensing Provide Improved Early Warning Signals for Food and Water Security? - <i>Fisher, Joshua B.</i>	072	Antenna-Coupled TES Bolometer Arrays for CMB Polarimetry - <i>Bock, James J.</i>	118	Carbon and Ecosystems Data Assimilation for the ISS Instrument Suite - <i>Schimmel, David S.</i>
030	Bistatic Scattering Modeling for Wetland Mapping with CYGNSS - <i>Lavalle, Marco</i>	073	A New Approach to Exoplanet Image Reduction - <i>Bottom, Michael</i>	119	Bistatic Reflectometry Using UHF Signals of Opportunity (SoOps) for SWE and RZSM Measurement - <i>Shah, Rashmi</i>
031	Improving the Infrastructure for Regional Sea Level Studies and Related Mission Formulations by Including Time-Varying Cryospheric and Hydrological Forcings and Their Uncertainties - <i>Lee, Tong</i>	074	Technology for Future Far-IR Missions: Demonstration of Large-Format Wideband Millimeter-Wave Spectroscopy with SuperSpec - <i>Bradford, Charles M.</i>	120	Under Ice-Shelf Ocean Exploration - <i>Castano, Rebecca</i>
032	GNSS Reflections Retrievals from SMAP - <i>Lowe, Stephen T.</i>	075	A Flexible Radio-Frequency Readout for Multiplexed Submillimeter-Wave Detectors - <i>Dowell, Charles D.</i>	121	Hidden Effects of Extreme Environments on Space Microelectronics - <i>Fleurial, Jean-Pierre</i>
033	Improving Our Understanding of Ocean Acidification and the Effects of Novel Carbon Sequestration Mechanisms in the Ocean Using ECCO-Darwin and New Rules for Carbonate Dissolution - <i>Menemenlis, Dimitris</i>	076	Ultrabroadband 5 THz Heterodyne Array Receiver for Extragalactic and Galactic Mapping - <i>Karasik, Boris S.</i>	122	Optimized Integrated Vehicle, Operations, and Network Constellation Design - <i>Herzig, Sebastian J.</i>
034	Improving Sea Level Rise Projections by Coupling Continental Scale Ice and Ocean Models - <i>Seroussi, Helene L.</i>	077	Ultrabroadband Mid-Infrared Heterodyne Detector for Detection of Extrasolar Planets - <i>Karasik, Boris S.</i>	123	System Level Autonomy to Enable Autonomous Mapping Missions of Small Solar System Bodies - <i>Bartrop, Kevin J.</i>
035	Ocean Acidification Revealed from Space - <i>Xie, Xiaosu</i>	078	Optimal Noise Match Determination of MMIC Low Noise Amplifiers - <i>Kooi, Jacob W.</i>	124	Dynamic Modeling of Articulated Space Robotic Spacecraft Using Dual Quaternions - <i>Bayard, David S.</i>
036	Seeking Stick-Slip Fault Creep Using Small UAS Topographic Measurements - <i>Donnellan, Andrea C.</i>	079	First All-Solid-State 2 THz Receiver for Lower Thermospheric 3-D Winds - <i>Mehdi, Imran</i>	125	Discontinuous Heat Microbial Reduction Techniques for Relieving ATLO Critical Path Impact - <i>Dean, Zachary S.</i>
037	Quantifying Ecosystem Structure & Function at High Resolution from Small Unmanned Aerial Systems - <i>Drewry, Darren T.</i>	080	Antenna-Coupled Bolometers for Grating Spectrometers - <i>O'Brient, Roger C.</i>	126	Radiometric Autonomous Navigation Fused with Optical for Deep Space Exploration - <i>Ely, Todd A.</i>
038	Linking Chlorophyll Fluorescence from the Leaf to the Satellite - <i>Frankenberg, Christian</i>	081	Dual Color Antenna-Coupled Bolometers for Control of Galactic Synchrotron and Dust Foregrounds in CMB Polarimetry - <i>O'Brient, Roger C.</i>	127	Miniature Advanced Pointing Imaging Instrument (mAPII) (Mini-Advanced Pointing Imaging Camera (mAPIC) and GPU Algorithms for Onboard Processing) - <i>Park, Sang H.</i>
039	Linking Seismicity and Fault Surface Properties - <i>Glasscoe, Margaret T.</i>	082	iPLUMES - Integrated Planetary Ultra-Sensitive Molecular Emission Spectrometer - <i>Siles Perez, Jose Vicente</i>	128	Additive Manufacturing of Structural Shells for Atmospheric and Surface Probes - <i>Borgonia, John Paul C.</i>
040	Deriving Velocity Fields of Small-Scale Ocean Eddies Using Multi-Sensor, Fine Resolution Imagery - <i>Holt, Benjamin M.</i>	083	Mid-IR Frequency Comb Generation for Very High Angular Resolution Astronomy - <i>Vasisht, Gautam</i>	129	Gradient Alloy Interfaces - <i>Dandino, Charles M.</i>
041	Hyperspectral Thermal Fire Emission Monitoring with HyTES - <i>Kalashnikova, Olga</i>	084	PARVI: The Palomar Habitable Zone Planet Finder - <i>Vasisht, Gautam</i>	130	Characterization and Mechanical Tuning of Additively Manufactured Multilayer Ion Thruster Grids - <i>Dillon, Robert P.</i>
042	Improving Volcano Eruption Forecasts with Satellite-Derived Topographic Maps and Physics-Based Models - <i>Lundgren, Paul R.</i>	085	Knife-Edge & ZWFS Fusion: Demonstrating Ultra-High Dynamic Range Sensing for Segmented Apertures - <i>Zareh, Shannon Kian G.</i>	131	Fabrication Feasibility of Directionally Compliant Interface Structures Using Direct Metal Laser Sintering (DMLS) - <i>Drymiotis, Fivos</i>
043	Land Surface and Sea Ice State Characterization with GPS Reflections Data: Characterizing Wetlands, Land Freeze/Thaw Transitions, and Polar Sea Ice with Bistatic Radar - <i>Podest, Erika V.</i>	086	Ultra-Wideband Receiver Package for the North American Array - <i>Velazco, Jose E.</i>	132	Design and Manufacturing of Lightweight Excavating and Trenching Tools for Future Landers Using Additive Manufacturing, Topology Optimization and Gradient Alloys. - <i>Hofmann, Douglas C.</i>

JPL 2018 Research Poster Conference Exhibitors (133-264)

133	Thermodynamic Modeling of Additively Manufactured Gradient Alloys - <i>Mcenerney, Bryan W.</i>	176	Micro Focus XRF Quantification for Applications in Planetary Science - <i>Allwood, Abigail C.</i>	223	Submillimeter-Wave Spectrometer for Small Satellites - <i>Chattopadhyay, Goutam</i>
134	Multifunctional Thermo-Structural Elements for Small Spacecraft Via Additive Manufacturing - <i>O'Donnell, Timothy P.</i>	177	D/H Isotopic Fractionation Induced by Sublimation in Water Ice: Laboratory Investigation Via In-Situ Spectroscopy Under Cryogenic Vacuum Conditions - <i>Choukroun, Mathieu N.</i>	224	Chip-Scale Heterodyne Spectrometers for CubeSats and Small Landers - <i>Chen, Pin</i>
135	Active Optics Eccentricity Corrections in Powder Bed Additive Manufacturing - <i>Roberts, Scott N.</i>	178	Three-Dimensional Radiance Simulations for Trace Gas Spectroscopy from Space - <i>Crisp, David</i>	225	Development of Low-Power SEP Technology to Enable High Delta-V Missions with SmallSat Spacecraft - <i>Conversano, Ryan W.</i>
136	Qualified Electronics for Low Temperature Environment - <i>Yang-Scharlotta, Jean</i>	179	Titan Lake Simulation Chamber - <i>Hodyss, Robert P.</i>	226	An Investigation into Inter-Satellite Ranging Techniques and Applications for Nanosatellite Platforms - <i>Gustafson, Eric D.</i>
137	Differential SNSPD Readouts for High Data Rate Deep Space Optical Communications - <i>Beyer, Andrew D.</i>	180	Technology for Icy Moon Seismology - <i>Kedar, Sharon</i>	227	Adapting the Rad-Hard CubeSat Avionics Technology Sphinx for Interplanetary Missions - <i>He, Yutao</i>
138	Towards High-Precision Navigation and Science Investigations with Deep-Space Optical Transceivers - <i>Peng, Michael Y.</i>	181	Infrasound as a Geophysical Probe Using Earth as a Venus Analog - <i>Komjathy, Attila</i>	228	Hybrid Rocket Propulsion for CubeSats - <i>Karp, Ashley C.</i>
139	Adaptive Predictive Control for Laser Communications Systems - <i>Tesch, Jonathan A.</i>	182	Multiwavelength Digital Holography for Spectral Discrimination of Bacteria and Minerals - <i>Lindensmith, Christian A.</i>	229	Operational Testing and Improvements of the ASU Smallsat Ground Station - <i>Klesh, Andrew T.</i>
140	Accelerating Diffusion to Enable Rapid Tool Design - <i>Anderson, Rodney L.</i>	183	Submillimeter-Wave Exploration of Comets: Isotopic Water and Minor Species Composition - <i>Mehdi, Imran</i>	230	Small Satellite Aerocapture for Increased Mass Delivered to Venus and Beyond - <i>Nelessen, Adam P.</i>
141	Multi-Spacecraft Motion Planning in Time-Varying Cluttered Environment Using Fast Real-Time Algorithms - <i>Bandyopadhyay, Saptarshi</i>	184	Development of Aseptic Assembly Techniques/Processes and Biobarrier/Bioshield Implementation Options for Recontamination Prevention - <i>Newlin, Laura E.</i>	231	Enabling Small Spacecraft Assay of the NEO Population: A Need for Small, Capable, Readily-Replicable Payloads for Remote Sensing of Volatiles - <i>Raymond, Carol A.</i>
142	Pulsar Based Navigation for Deep Space, Planetary and Interstellar Missions - <i>Bayard, David S.</i>	185	An Advanced, Compact, Ultraviolet Imaging Spectrometer for Planetary Systems - <i>Nikzad, Shouleh</i>	232	Dust-Off! Advancing the DUST Concept to Flight - <i>Smith, James A.</i>
143	AutoNAV Across the Solar System - <i>Bhaskaran, Shyamkumar</i>	186	Electrochemical Sensors for Understanding Icy Worlds - <i>Noell, Aaron C.</i>	233	SWARMS - <i>Smith, James A.</i>
144	Tying the Optical and Radio Celestial Reference Frames to Enable Seamless Navigation - <i>Jacobs, Christopher S.</i>	187	Hypersaline Microbial Preservation & Diversity from the Modern to the Premian for Future In-Situ Astrobiological Sample Analyses - <i>Perl, Scott M.</i>	234	Two-Phase Thermal Control Technology for Small Spacecraft Exploration - <i>Sunada, Eric T.</i>
145	A Generic GPU Algorithms for Shooting Methods & Finding Periodic Orbits - <i>Lo, Martin W.</i>	188	Carbon Nanotube-Based Electrode Characterization for Improved Chemical Sensing & Enhanced Energy Density Supercapacitors - <i>Scott Kristof, Valerie</i>	235	Occultation Soundings in the Venusian Atmosphere Using Small Satellites - <i>Vergados, Panagiotis</i>
146	Navigation Using Deep-Space Optical Communication Systems - <i>Martin-Mur, Tomas J.</i>	189	Automated, Multispectral Imaging Workflow for Returned Sample Science - <i>Williford, Kenneth H.</i>	236	Rad-Tolerant Low Power Avionics for Deep Space Small Spacecraft - <i>Whitaker, William D.</i>
147	MAARS: Machine Learning-Based Analytics for Autonomous Rover Systems - <i>Ono, Masahiro</i>	190	Microfluidic Chemical Analyzer for Europa Flyby or Lander Missions - <i>Willis, Peter A.</i>	237	Continental Scale Multi-Sensor 4D Displacement Time-Series Estimation - <i>Agram, Piyush S.</i>
148	Three-Body Periodic Orbit Maintenance and Low Thrust Orbit Transfers Via Optimal Thrust-Coast-Thrust Maneuvers - <i>Woollands, Robyn M.</i>	191	Methane Sensing Immersion Grating Spectrometer - <i>Wilson, Daniel W.</i>	238	A 6U Monolithic Millimeter-Wave Integrated Circuit (MMIC) Low Noise Spectrometer for Carbon Monoxide All-Sky Survey with a CubeSat - <i>Samoska, Lorene A.</i>
149	Ground-Based Nanoradian Optical Astrometry and Applications to Navigation - <i>Zhai, Chengxing</i>	192	High Efficiency LILT Solar Cells for Deep-Space Small Spacecraft - <i>Boca, Andreea</i>	239	Lifecycle Product Development: Research Opportunities for the Next Generation of Space Systems Engineers - <i>Alibay, Farah</i>
150	Optical Model Cross-Check to Ensure Equality as Part of V&V Activity - <i>Sigrist, Norbert</i>	193	Storing Harvested Energy from Hydrothermal Vents for Robotic Operations - <i>Brandon, Erik J.</i>	240	A Formal Model for Assurance Case Development and Efficient Testing - <i>Smith, Benjamin D.</i>
151	Dispersion-Compensated Interband Cascade Optical Frequency Combs - <i>Bagheri, Mahmood</i>	194	Power Beaming for Spacecraft in Deep Space and Shadowed Regions - <i>Grandidier, Jonathan</i>	241	Advanced Modeling of Fluid-Structure Interaction for Softgoods in Supersonic Flow (Advancement of Softgoods Modeling in Fluid Flows) - <i>Peterson, Lee D.</i>
152	A Self Referenced Electro Optic Modulation Frequency Comb for Extreme Precision Radial Velocity Detection - <i>Beichman, Charles A.</i>	195	Organic Lithium-Ion Batteries for Future Space Applications - <i>Shevade, Abhijit V.</i>	242	Optical Atomic Clock for Fundamental Physics and Precision Metrology in Space - <i>Williams, Jason R.</i>
153	Metamaterials for Advanced Visible and Ultraviolet Optical Components - <i>Bell, Lloyd Doug, II</i>	196	Ultra-High Specific Impulse Lithium-Fueled Ion Thruster for Interstellar Precursor Missions - <i>Brophy, John R.</i>	243	Method of Smart-Screening for NAND Flash Memory Parts Based on Weak Bits - <i>Yang-Scharlotta, Jean</i>
154	Development of Orbitrap-Based Fourier-Transform Mass Spectrometry for High-Performance Isotopic Analysis of Solar System Materials - <i>Cable, Morgan L.</i>	197	Alternative-Propellant Electric Thruster Cathodes - <i>Goebel, Dan M.</i>	243A	Multi-Scale Reliability and Radiation Modeling for Virtual Assessment of High Performance Space Systems Designed Using Commercial Electronics - <i>Adell, Philippe C</i>
155	Large Array of Single Photon Detecting Quantum Capacitance Detectors (QCDs) - <i>Echternach, Pierre M.</i>	198	Light-Driven Electrochemical Production of Oxygen and Fuel from CO2 and Sunlight for Mars ISRU - <i>Jones, Simon C.</i>	244	Low-Profile High-Gain Deployable Metasurface Telecommunication Antenna for Ka-Band - <i>Chattopadhyay, Goutam</i>
156	Next Generation Science-Quality Ultra-Stable Oscillators for Spaceflight - <i>Grudin, Ivan S.</i>	199	Hybrid-Rocket Energy Flux Sensor (H-REFS) - <i>Karp, Ashley C.</i>	245	Quantification of Instrument Parameters and Observation Limits for Acceptable Signal to Noise Ratios Using HOTBIRD and a New Novel D-ROIC - <i>Davies, Ashley G.</i>
157	Optical Characterization of P-Compensated Long-Wave Infrared InAs/InAsSb Superlattices - <i>Khoshakhlagh, Arezou</i>	200	Bi-Modal Specific Impulse Characterization of Indium Electrospray - <i>Marrese-Reading, Colleen M.</i>	246	Properties of Fast Radio Bursts at High Radio Frequencies - <i>Majid, Walid A.</i>
158	Stable Field Emitters Using Inverse Opal Structures - <i>Montemayor, Lauren C.</i>	201	Investigation of Laser Induced Solid Fuel Pyrolysis in Hybrid Rockets - <i>Reeve, Ronald T.</i>	247	Using Compressible Ghost Imaging Onboard Deep Space Sensors to Improve Communication Efficiency - <i>Mohageg, Makan</i>
159	Coupled Atmosphere-Surface Retrievals for Visible/Shortwave Infrared Imaging Spectroscopy - <i>Natraj, Vijay</i>	202	Multiplexed Manipulation - <i>Edelberg, Kyle D.</i>	248	Electronically Simple Underwater Imaging - Acoustic Leaky Wave Antenna - <i>Naify, Christina J.</i>
160	TKIDs for CMB Polarimetry and Submillimeter Astrophysics - <i>O'Brient, Roger C.</i>	203	Self-Reliant Rovers for Increased Mission Productivity - <i>Gaines, Daniel M.</i>	249	Wireless Applique for Integration and Test - <i>Lay, Norman E.</i>
161	Multifunctional Swarm Array with Integrated Deep Space Ka-Band and Photovoltaics - <i>Quadrelli, Bruno M.</i>	204	Tensegrity Ocean World Landers (TOWL) - <i>Gebara, Christine A.</i>	250	Iris Transponder for Radio Science - <i>Atkinson, David H.</i>
162	Low-Power Far-IR Detectors for Temperature and Climate Monitoring Missions (LoFID) - <i>Rais-Zadeh, Mina</i>	205	Underwater Mobile Manipulation - <i>Gildner, Matthew</i>	251	Evaluating Weather Reanalysis Performance for the Application of Radar Noise Corrections - <i>Bekaert, David</i>
163	Integrated Bandpass Filters for UV-Enhanced Silicon Detectors - <i>Shapiro, Charles A.</i>	206	Terrain Classification for Mars Rovers with Visible and Thermal Images - <i>Iwashita, Yumi</i>	252	Adaptive EMI Mitigation - <i>Bell, David J.</i>
164	Far Infrared Superconducting Nanowire Single Photon Detectors - <i>Shaw, Matthew D.</i>	207	Unified Processing for Robotic Icy Terrain Exploration (UPRITE) - <i>Kennedy, Brett A.</i>	253	Next Break Throughs in Radio Metric Tracking - <i>Border, James S.</i>
165	High Speed Cross-Correlator & AGC Demonstration - <i>Tanner, Alan B.</i>	208	Tactile Wheels for Robust Surface Mobility, Sampling, Surveying, and Science - <i>Kennedy, Brett A.</i>	254	Enabling Higher Data Rates with a New Generation of Higher Frequency Antennas - <i>Bradford, Samuel C.</i>
166	Enhanced Barrier Infrared Detector and Focal Plane Array Development - <i>Ting, David Z.</i>	209	Underwater Miniature Robotic Sampling Arm - <i>Koch, Justin R.</i>	255	Search for Marine Debris Signatures in Radar Data - <i>Burgin, Mariko S.</i>
167	Real-Time Reconfigurable Full-Frame/Hyperspectral Imager - <i>Wilson, Daniel W.</i>	210	The Barefoot Rover: Smarts for Innervated Robotic Wheels - <i>Mandrake, Lukas</i>	256	Low Profile High Gain Antenna for Extreme Environment Enabling DTE/DFE Telecommunication Link with Landers and Rovers - <i>Chahat, Nacer E.</i>
168	High Efficiency Superconducting Frequency Multiplier - <i>Cunnane, Daniel P.</i>	212	Technologies for International Science Space Station (TISSS) - <i>Mukherjee, Rudranarayan M.</i>	257	Modifying a Comet-Plume Radar to Enable Earth Atmospheric Observations - <i>Cooper, Ken B.</i>
169	High-Sensitivity MKID Arrays for the Mid-IR Band - <i>Day, Peter K.</i>	213	Exploring and Sampling Recurring Slope Lineae (RSL) and Other Extreme Terrains - <i>Nesnas, Issa A.</i>	258	Surface Pressure Sensing Radar Using U-band (50-56 GHz) - <i>Gawande, Rohit S.</i>
170	Distributed Transition Edge Sensor Arrays with Kinetic Inductance Readout - <i>Leduc, Henry G.</i>	214	Autonomous Approach of Small Bodies - <i>Nesnas, Issa A.</i>	259	Design of a Transmitter Feed for Orbital Angular Momentum Radar in the Deep Space Network - <i>Naudet, Charles J.</i>
171	Next-Generation Miniaturized Thermal Imagers Based on Advanced Thermoelectric Alloys and an Innovative Ultra-Compact Optical Design - <i>Mariani, Giacomo</i>	215	Improved Navigation in Complex Terrains - <i>Nesnas, Issa A.</i>	260	Implementation of Solid State Amplifier Module for One Megawatt Solid State Solar System Radar - <i>Ocampo, Juan J.</i>
172	Development of Science Analysis Tools and Software for Orbital and In-Situ Spectroscopic Data - <i>Beegle, Luther W.</i>	216	Multi-Instrument Confocal Surface Mapping Software - <i>Parness, Aaron</i>	261	Radio Science and Astronomy Via the Universal Space Transponder - <i>Pugh, Michael P.</i>
173	Characterizing a New Electric Field Sensor for Mars Electrostatic Discharges - <i>Murphy, David W.</i>	217	Venus Surface Sample Acquisition and Transfer System - <i>Wilcox, Brian H.</i>	262	Passive Sounding using Astronomical Radio Sources for Earth and Planetary Science - <i>Romero-Wolf, Andrew</i>
174	Developing a JPL Mass Spectrometer for Planetary Missions - <i>Darrach, Murray R.</i>	218	Enabling SmallSat Heliophysics Missions Through Low Thrust Trajectories to Sun-Earth Lagrange Points - <i>Alibay, Farah</i>	263	Simulation of Novel Processing Concepts for a Lightweight Landing Radar - <i>Venkatesh, Vijay</i>
175	Combined Miniature Mass Spectrometer / Miniature Tunable Laser Spectrometer - <i>Webster, Chris R.</i>	219	Exploring Ice Giants Through Radio Science Enabled by SmallSats - <i>Ao, Chi O.</i>	264	Ultra-Precise Delay Measurement for Real-Time Uplink Array Calibration - <i>Vilnrotter, Victor A.</i>
		220	Large Aperture Deployable Reflector (LADeR) for Small Satellites - <i>Arya, Manan</i>		
		221	Towards Sub-mm Level Formation Knowledge and mm-Level Control of Distributed Spacecraft for Earth Remote Sensing Using Small Satellites - <i>Cacan, Martin</i>		
		222	One-meter X/Ka-Band Deployable Antenna for Small Satellites - <i>Chahat, Nacer E.</i>		