\*Times are listed as Eastern Daylight Savings (EDT) (USA and Canada)

Tuesday, 30 August 2022				
10:00 - 10:05 Conference Introduction and Review of Conference Logistics, Dr. Erik Brandon, Jet Propulsion Laboratory				
-	Keynote: NASA Planetary Science Division: Today and Into the Future, Mr. Eric Ian	·		
	Transition to Two Tracks	son, Deputy Director, Flanetary Science Division, NASA		
10.33 - 10.40	Track 1: Power Systems and Architectures (Deep Space Missions)	Track 2: Power Sources (Fission and Radioisotope Power Sources)		
	Session Chair: Dr. Christopher Iannello, NASA Kennedy Space Center	Session Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory		
	Co-Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory	Co-Chair: Dr. Sabah Bux, Jet Propulsion Laboratory		
10:40 - 11:05	Dragonfly Mission Electrical Power Subsystem (EPS) Architecture	Lessons Learned from the First Fission Surface Power Project		
44.05.44.00	Mr. Kyle Weber, The Johns Hopkins University Applied Physics Laboratory	Mr. Lee Mason, NASA Glenn Research Center		
11:05 - 11:30	Power Electronics Design for the Mars Helicopter  Mr. Joseph Zitkus, Jet Propulsion Laboratory	Compact Power Generation Systems for Nuclear Electric Propulsion (NEP) Dr. Dov Rhodes, X Energy, LLC		
11:30 - 11:55	Power Distribution Assembly for the Psyche Asteroid Mission	On-Orbit Reactor Assembly and Design of a Regulatory Pathfinder Mission		
	Mr. Rufus Simon, Jet Propulsion Laboratory	Dr. Lucas Beveridge, Atomos Nuclear and Space Corporation		
11:55 - 12:20	Power Structure System for PSYCHE/MULTISPECTRAL IMAGER – CAMERA Mr. Brandon Witcher, VPT, Inc.	Next Gen RTG Mod 1 Overview Mr. Thomas DeMichael, NASA Glenn Research Center		
12:20 - 12:45	HALO Battery System	EmberCore <sup>™</sup> Family of Commercial Radioisotope Solutions for Space Power		
	Mr. Louis Levine, Northrop Grumman Systems Corporation, Tactical Space Systems Division	Applications Dr. Christopher Morrison, Ultra Safe Nuclear		
12:45 - 1:15		Break		
1:15 - 1:40	Gateway Power Quality Lessons Learned Mr. Nicolas Carbone, NASA	Track 2: Power Sources (Radioisotope Thermoelectric Generators)		
		Session Chair: Dr. Jean-Pierre Fleurial, Jet Propulsion Laboratory Co-Chair: Dr. Jonathan Grandidier, Blue Origin		
		Comparative Analysis of Some Thermal Energy Conversion Technologies for Deep		
		Space Applications		
1:40 - 2:05	Track 1: Power Systems and Architectures (Lunar Surface Power and Grids)	Dr. Sabah Bux, Jet Propulsion Laboratory  Planetary Mission Concepts utilizing Radioisotope Power Systems		
1.40 2.03		Mr. Brian Bairstow, Jet Propulsion Laboratory		
	Session Chair: Mr. Brent Gardner, NASA Glenn Research Center			
	Co-Chair: Dr. Wesley Fuhrman, The Johns Hopkins University Applied Physics Laboratory			
	NASA's Technology Priorities for Lunar Surface Power			
2.05 2.20	Mr. John Scott, NASA Space Technology Mission Directorate	Contain Palentine An Hadra of MANDEC Desfaurance on Contacts		
2:05 - 2:30	Establishing a Lunar Surface Power Grid Mr. George Thomas, NASA Glenn Research Center	Curious Behavior: An Update of MMRTG Performance on Curiosity Dr. Chris Whiting, University of Dayton		
2:30 - 2:55	High Efficiency Modular Resonant Power Converters	Development Status of Skutterudite-Based Thermoelectric Technology for		
	Dr. Ahmadreza Amirahmadi, Jet Propulsion Laboratory	Integration into a Potential Skutterudite-Multi Mission Radioisotope Thermoelectric Generator		
		Dr. Thierry Caillat, Jet Propulsion Laboratory		
2:55 - 3:20	Autonomous Power Control for the Lunar Power Grid Mr. Jeffrey Csank, NASA Glenn Research Center	Sizing Optimization of Thermoelectric Generators Considering Alternative Heat Source Materials and Voltage Transformation		
	Wil. Jeffrey Csalik, NASA Geffit Research Ceffe	Mr. Shane Riley, University of Pittsburgh		
3:20 - 3:30	Br	eak		
3:30 - 3:55	Track 1: Power Systems and Architectures (Standards and Design for Deep Space)	Manufacturing Hybrid Critical Point Dried Aerogel for RTG Thermoelectric Modules		
	epart,	Dr. Ying Song, Teledyne Energy Systems, Inc.		
	Session Chair: Dr. Wesley Fuhrman, The Johns Hopkins University Applied Physics Laboratory			
	Co-Chair: Mr. Brent Gardner. NASA Glenn Research Center			
	Space Power Consortium			
	Mr. Brent Gardner, NASA Glenn Research Center			
3:55 - 4:20	Modular Open Systems Approach (MOSA) for a Robust Commercial Lunar Ecosystem	Track 2: Power Sources (Advanced Concepts)		
	Mr. Matt DeMinico, NASA Glenn Research Center	Session Chair: Dr. Jonathan Grandidier, Blue Origin Co-Chair: Mr. Jeremiah McNatt, NASA Glenn Research Center		
		Long Range Power Projection via Directed Energy		
		The Path to Long Term Strategic Transformation		
4:20 4:45	Historical Duration of Use Dower Sigure Passage and Undate	Prof. Philip Lubin, The University of California, Santa Barbara		
4:20 - 4:45	Historical Duration of Use Power Figure Research and Update Mr. Marc Hayhurst, The Aerospace Corporation	Delta Stirling Engine for Space and Terrestrial Power Needs Mr. Maury White, Stirling Innovations, LLC		
4:45 - 5:10	Radiation and the Next Wave of Power Electronics in Space	Selection of Linear Alternator Voltage for Dynamic Radioisotope Power Systems		
	Mr. Jason Osheroff, NASA Goddard Space Flight Center	Dr. Donguk (Max) Yang, NASA Glenn Research Center		
5:10 - 5:35	Total Dose Modeling of the Transit through the Van Allen Belts	Tailoring the Low-Dimensional Nanocarbon-Based Field Emitters Collective		
	Dr. Thomas Carstens, NASA Goddard Space Flight Center	Atomic Vibrations for Predictive Performance Enhancement of Thermionic		
		Converters  Dr. Alexander Lukin, Western-Caucasus Research Center		
5:35 - 5:40	Preview for Next Day & Adjourn	Dr. Alexander Lukin, Western-Caucasus Research Center Preview for Next Day & Adjourn		
5.55 5.40		1		

\*Times are listed as Eastern Daylight Savings (EDT) (USA and Canada)

	*Times are listed as Eastern Daylight Savings (EDT) (USA and Canada)  Wednesday, 31 August 2022				
10:00 - 10:05	5				
	Keynote: The Mars Sample Return Mission: Challenges and Constraints, Mr. Rob Manning, Chief Engineer, Jet Propulsion Laboratory				
	Transition to Two Tracks	walling, Chief Engineer, Jet Propulsion Laboratory			
10.33 - 10.40	Track 1: Energy Storage (Li-ion Technologies)	Track 2: Power Conversion, Switching and Transfer (Wide Bandgap Semiconductors)			
	Session Chair: Dr. William West, Jet Propulsion Laboratory				
	Co-Chair: Mr. Thomas Miller, NASA Glenn Research Center	Session Chair: Ms. Shelly Sposato, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center			
10:40 - 11:05	The Use of Li-ion Batteries for a 50-Year Space Flight	Next Generation Radiation Hard GaN Power Devices			
44.05.44.30	Dr. Hector Beltran, Universitat Jaume I	Mr. Sean Morrison, EPC-Space and Dr. Robert Strittmatter, EPC-Space			
11:05 - 11:30	<b>Health Monitoring and Prognostics in Li-ion Batteries</b> Dr. Chetan Kulkarni, KBR, Inc., NASA Ames Research Center	Wide Bandgap (WBG) Embedded Drain High Voltage Superjunction MOSFET (mSJMOS-CD) <sup>TM</sup> : Enabling High Voltage DC Power Distribution and Conversion Efficiency for Reduced Power Consumption in Power Systems In Deep Space Applications Mr. Samuel Anderson, IceMOS Technology Corporation			
11:30 - 11:55	Reducing the Risk of Thermal Propagation Through Innovative Inactive Materials Dr. Brian Morin, Soteria Battery Innovation Group	Low-Energy Ion-Induced Single-Event Burnout in Gallium Oxide Schottky Diodes Mr. Rick Cadena, Vanderbilt University ISDE			
11:55 - 12:20	Li-ion Commercial Cell Strategic Reserve Dr. Eric Darcy, NASA Johnson Space Center	Single-Event Effects in SiC Power Devices for Space Applications Mr. Arijit Sengupta, Vanderbilt University			
12:20 - 12:45	Materials Development for Advanced Li-Ion Cells and the Center for Research in Extreme Batteries (CREB)	Gate Drive Review and Best Practice Design for WBG HV Power Switches in Space Mr. Paul Schimel, Microchip			
12:45 - 1:15	Dr. Wesley Henderson, U.S. Army Research Laboratory (ARL)	n Break			
12.45 1.15	Track 1: Energy Storage (Advanced Battery Chemistries)	Track 2: Power Sources (Photovoltaics)			
	Session Chair: Dr. Erik Brandon, Jet Propulsion Laboratory Co-Chair: Dr. William West, Jet Propulsion Laboratory	Session Chair: Mr. Jeremiah McNatt, NASA Glenn Research Center Co-Chair: Dr. Jonathan Grandidier, Blue Origin			
1:15 - 1:40	High Energy Density Lithium-Ion Cells with Silicon Nanowire Anode Technology Dr. Ionel Stefan, Amprius Technologies, Inc.	The Deep-Space Solar Array: A Power Source for Missions to Saturn and Beyond Dr. Andreea Boca, Jet Propulsion Laboratory			
1:40 - 2:05	Advanced 4Ah 18650 Li-ion Cell with Zero-Volt Tolerance for Space Applications Dr. Jiang Fan, American Lithium Energy Corporation	Photovoltaic Investigation on the Lunar Surface (PILS) PV Testbed for Lunar Landers Mr. Jeremiah McNatt, NASA Glenn Research Center			
2:05 - 2:30	Unlocking Silicon Anodes	Advancements in Solaero's III-V Solar Cells			
2:30 - 2:55	Dr. Surya Moganty, Sionic Energy High Energy Semi-Solid Anode In-Situ Battery	Dr. Nate Miller, SolAero by RocketLab  Compact Telescoping Array for NASA's Lunar Vertical Solar Array Technology			
2.30 - 2.33	Dr. Feng Zhao, Storagenergy Technologies	Program  Mr. Drew Uzupis, Northrop Grumman Corporation			
2:55 - 3:20	ADA's Path to 750 Wh/kg	LAMPS: Lunar Array, Mast, and Power System			
	Dr. Jeff Nelson, ADA Technologies, Inc.	Mr. Hunter Williams, Honeybee Robotics			
3:20 - 3:30	Br	eak			
3:30 - 3:55	Track 1: Advanced Power Concepts (Extreme Environment Access)	Photovoltaics-Driven Power Production Can Support Human Exploration on Mars Mr. Aaron Berliner, Center for the Utilization of Biological Engineering in Space			
	Session Chair: Dr. Sabah Bux, Jet Propulsion Laboratory Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory SLUSH (Search for Life Using Submersible Heated Drill): Nuclear Powered Probe for Exploration of Europa Ocean Dr. Kris Zacny, Honeybee Robotics				
3:55 - 4:20	Reconfigured Heat Sources for Cryobot RTG Power Systems Dr. Benjamin Hockman, Jet Propulsion Laboratory	Track 2: Energy Storage (Advanced Battery Chemistries)			
		Session Chair: Mr. Thomas Miller, NASA Glenn Research Center Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory Advanced Lithium Sulfur Technologies for High Energy Applications Dr. James Dong, Navitas Systems ASG			
4:20 - 4:45	Atomic Planar Power for Lightweight Exploration (APPLE) Dr. E. Joseph Nemanick, The Aerospace FFRDC	High Energy and Long-Life Lithium-Sulfur Batteries Enabled by Lyten 3D  Graphene®  Dr. Ratnakumar Bugga, Lyten Systems			
4:45 - 5:10	PowerStone: Asteroid Depot for Energy and Materials Prof. Peter Schubert, Indiana University-Purdue University Indianapolis	Liquid Electrolyte Design for Low-Temperature Li Metal Batteries Mr. John Holoubek, University of California San Diego			
5:10 - 5:35	The Bioinspired Ray for Extreme Environments and Zonal Exploration (BREEZE) Dr. Javid Bayandor, University at Buffalo - The State University of New York	Bend Tolerant Thermal Management System for Wing Integrated Battery Packs Mr. Dustin Hall, NASA Glenn Research Center			
5:35 - 5:40	Preview for Next Day & Adjourn	Preview for Next Day & Adjourn			

\*Times are listed as Eastern Daylight Savings (EDT) (USA and Canada)

10:00 - 10:05 Conference Introduction and Review of Conference Logistics, Dr. Erik Brandon, Jet Propulsion Laboratory  10:05 - 10:35 Keynote: Opening a New Era on the Moon with Space Robotics, Mr. Dan Hendrickson, VP of Business Development, Astrobotic  10:35 - 10:40 Transition to two tracks  Track 1: Power Conversion, Switching and Transfer  Session Chair: Dr. Wesley Fuhrman, The Johns Hopkins University Applied Physics Laboratory  Co-Chair: Ms. Shelly Sposato. Jet Propulsion Laboratory  10:40 - 11:05 Providing Tethered Power to Permanently Shadowed Regions Dr. Paul van Susante, Michigan Technological University  11:05 - 11:30 Revisiting Edison and Tesla – AC and DC Power Considerations for Planetary Surface Power Transfer Dr. Ansel Barchowsky, Jet Propulsion Laboratory  11:30 - 11:55 Architecture and Power Transfer for Fission Surface Power System Dr. Christopher Barth, NASA Glenn Research Center  Wide Temperature Battery Development for CADRE Autonomous Lunar Rovers Dr. John-Paul Jones, Jet Propulsion Laboratory		Thursday 1 Conton				
1003-1004   Track 2: Power Conversion, Switching and Transfer   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)   Track 2: Energy Storage (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage on the Moon (Fuel Cells Systems for Energy Storage On the Energy Storage on the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cells Systems for Energy Storage On the Moon (Fuel Cell	Thursday, 1 September 2022					
10.35 - 10.40  17. Transition to two tracks  17. Track 2E tenergy Storage (fuel Colls and High Temperature Energy Storage)  2. Session Chair Dr. Westery Fuhrman, The Johns Hopkins University Applied  2. Session Chair Dr. Westery Fuhrman, The Johns Hopkins University Applied  3. Public Laboratory  3. Co. Chair Jim. Shells Shoots. Jet Produlsion Laboratory  4. Chair Jim. Shells Shoots. Jet Produlsion Laboratory  5. Public Jim. Shells Shoots. Jet Produlsion Laboratory  6. Chair Jim. Shells Shoots. Jet Produlsion Laboratory  7. Chair Jim. Shells Shoots. Jet Produlsion Laboratory  8. Public Jim. Shells Shoots. Jet Produlsion Laboratory  8. Public Jim. Shells Shoots. Jet Produlsion Laboratory  9. Annual Randow, Jet Produlsion Laboratory  11. Jim. Jim. Jim. Jim. Jim. Jim. Jim. Jim	10:00 - 10:05	00 - 10:05 Conference Introduction and Review of Conference Logistics, Dr. Erik Brandon, Jet Propulsion Laboratory				
Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage) Session Chair Dr. Westey Fuhrman, The Johns Hopkins University Applied Physic Laboratory Co-Chair Mr. Shelly Sociato, Jet Propulsion Laboratory Co-Chair Mr. Shelly Sociator, Jet Mr. Shell	10:05 - 10:35	Keynote: Opening a New Era on the Moon with Space Robotics, Mr. Dan Hendrick	sson, VP of Business Development, Astrobotic			
session Chair: Dr. Wesley Fuhrman, The Johns Hopkins University Applied Physics Laboratory Co Chair: Mr. Shelly Shooset. Jet Propulsion Laboratory Co Chair: Mr. Shelly Shooset. Jet Propulsion Laboratory Dr. Dr. Dr. Wesley Fuhrman, The Johns Hopkins University Applied Physics Laboratory Co Chair: Mr. Shelly Shooset. Jet Propulsion Laboratory Dr. Dr. Dr. Wesley Fuhrman, The Johns Hopkins University Dr. And Shelly was Swarte, Moliging Technological University Dr. And Shell	10:35 - 10:40	Transition to two tracks				
Physics abporatory Co-Chair Ms. Shelly Sossato. Jet Propulsion Laboratory Or, 104 on 105 Providing Techned Power to Permanenthy Shadowed Regions Or, Put van Sussate, Michagina Technological University No. Pacel Bardinoval, University No. Pacel Bardinoval, University No. Pacel Bardinoval, University Or. Annel Bardinovaly, Jet Propulsion Laboratory Or. Annel Bardinovaly, Jet Propulsion Laboratory Or. Christopher Sarth, MSAS Giom Research Center Or. Annel Barchovsky, Jet Propulsion Laboratory Or. William West, Jet Propulsion Laboratory Or. Chair Dr. John Paul Jones, Jet Propulsion Laboratory Or. Chair Dr. John Paul Jones, Jet Propulsion Laboratory Or. Peter Cabavy, Chry Lab Inc.  140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 -		Track 1: Power Conversion, Switching and Transfer	Track 2: Energy Storage (Fuel Cells and High Temperature Energy Storage)			
Physics abporatory Co-Chair Ms. Shelly Sossato. Jet Propulsion Laboratory Or, 104 on 105 Providing Techned Power to Permanenthy Shadowed Regions Or, Put van Sussate, Michagina Technological University No. Pacel Bardinoval, University No. Pacel Bardinoval, University No. Pacel Bardinoval, University Or. Annel Bardinovaly, Jet Propulsion Laboratory Or. Annel Bardinovaly, Jet Propulsion Laboratory Or. Christopher Sarth, MSAS Giom Research Center Or. Annel Barchovsky, Jet Propulsion Laboratory Or. William West, Jet Propulsion Laboratory Or. Chair Dr. John Paul Jones, Jet Propulsion Laboratory Or. Chair Dr. John Paul Jones, Jet Propulsion Laboratory Or. Peter Cabavy, Chry Lab Inc.  140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 - 140 -		Session Chair: Dr. Wesley Euhrman, The Johns Honkins University Applied	Sassian Chair: Mr. Thomas Miller, NASA Glann Passaarch Center			
Co-Chair Ms. Shelly Spotato, let Propulsion Laboratory  Regenerative Fuel Cell Systems for Energy Storage on the Moon  In. Paul van Susante, Michigan Technological University  Or. Annel Barchovsky, let Propulsion Laboratory  Or. Annel Barchovsky, let Propulsion Laboratory  Or. Annel Barchovsky, let Propulsion Laboratory  Or. Shell Barchovsky, let Propulsion Laboratory  Or. Shell Barchovsky, let Propulsion Laboratory  Or. Annel Barchovsky, let Propulsion Laboratory  Or. Tom Advanced, Wide Operating Temperature Batteries for Venus Aerobot Missions  Or. William West, let Propulsion Laboratory  Or. Tom Advanced Power Concepts (Beta-voltaics and Small RTG))  Track 1: Advanced Power Concepts (Beta-voltaics and Small RTG)  Track 2: Energy Storage (Extreme Environment and Primary Power Sources)  Or. Tom Advanced, Wide Operating Temperature Batteries for Venus Aerobot Missions  Or. William News, let Propulsion Laboratory  Or. Tom Advances of Physical Environments  Or. Peter Cabavy, City Labs Inc.  1:10 - 120   High-Energy Dense Betwoltaic above the Cytherana Surface (HillStuds)  Mr. Anderso Connec, Vindering Journal Students of Connection of Connection Conn						
10:00 - 10:05 Providing Techneed Power to Permanently Shadowed Regions 10:00 Providing Techneed Power to Permanently Shadowed Regions 10:00 Provided Anneas Technologies (1) Individually 10:00 Provided Power States (1) Propulsion Laboratory (1) Provided Power States (1) Propulsion Laboratory (1) Propulsi			Co-Chair: Dr. William West, Jet Propulsion Laboratory			
Dr. Paul van Stuante, Michigan Technologies  11.50 - 11.30 Reviting Edition and Technologies  11.50 - 11.30 Reviting Edition and Technologies  11.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  11.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  11.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  11.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  11.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  11.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Propulsion Laboratory  12.50 - 11.50 Reviting Edition Among the Edition A	10:40 - 11:05		Regenerative Fuel Cell Systems for Energy Storage on the Moon			
Liunar South Pole Regenerative Fuel Cell System Efficiency Analysis Marken Power Transfer for Fision Surface Power System Or. Annel Barchowsky, Jet Propulsion Laboratory Or. Annel Barchowsky, Jet Propulsion Laboratory Or. Christopher Barth, NASA Glenn Research Center Or. Ansel Barchowsky, Jet Propulsion Laboratory Or. Michael Barclay, Advanced Thermal Batteries, Inc.    Value   Policy   Poli	10.40 - 11.03	, ,	, , ,			
Surface Power Transfer Or. Annel Barchowsky, Jet Propulsion Laboratory  1.130 - 11.55 Architecture and Power Transfer for Fission Surface Power System of Critisopher Barth, NASA Glenn Research Center Or. John-Paul Jones, Jet Propulsion Laboratory  1.155 - 12.20 Tether Power for Remote Loads on Planetary Surfaces Dr. Annel Barchowsky, Jet Propulsion Laboratory Dr. Almandreza Arnishmadi, Jet Propulsion Laboratory Dr. Almandreza Arnishmadi, Jet Propulsion Laboratory Dr. Almandreza Arnishmadi, Jet Propulsion Laboratory Dr. Track 1: Advanced Power Concepts (Beta-voltaics and Small RTGs) Session Chair: Dr. Jonathan Grandidier, Blue Origin Go-Chair Dr. Yladimir Jovovic, Jet Propulsion Laboratory Sources) Sources) Sources Sources Sources Sources Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Annel Description, Jet Propulsion Laboratory Dr. Manier Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr	11:05 - 11:30					
1130 - 11.55   Architecture and Power Transfer for Fission Surface Power System Or. Christopher Barth, VASA Glenn Research Center Or. John Paul Jones, et Propulsion Laboratory Or. Ansel Barthowsky, Jet Propulsion Laboratory Or. Almodreza Amirahmadi, Jet Propulsion Laboratory Or. Almodreza Amirahmadi, Jet Propulsion Laboratory Or. William West, Jet Propulsion Laboratory Or. Ochair: Dr. Valdimir Jovovic, Jet Propulsion Laboratory Or. Ochair: Dr. Valdimir Jovovic, Jet Propulsion Laboratory Or. Ochair: Dr. Valdimir Jovovic, Jet Propulsion Laboratory Or. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Or. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Or. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Or. Or. And Dr. Valdimir Jovovic, University of Bindia, Department of Materials Science and Engineering.  2:30 - 2:55 A Highly Shock-Tolerant, Single-RHU RPS Or. John McCoy, Hv2 Technology, Inc. Propulsion Laboratory Or. Marian Center Clause, University of Bindia, Department of Materials Science and Engineering.  3:20 - 3:20 Marian Concept Design for Operation on Surfaces of Venus and Moon Mr. Erick 2-12 (Liputa) (L	11.00					
Dr. Christopher Barth, MASA Glem Research Center  Dr. John Paul Jones, Jet Propulsion Laboratory Dr. Ansel Barchowsky, Jet Progulsion Laboratory Dr. Ansel Barchowsky, Jet Progulsion Laboratory Dr. Ahmadersa Amirahmadi, Jet Propulsion Laboratory Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Center Crane/Purdue University Dr. Tom Adman, Naval Surface Waffare Company Center Conversion Surface of Venus and Moon Dr. Eric Poliquin, Jet Propulsion Labora						
11.55 - 12.20   Steher Power for Remote Loads on Planetary Surfaces   Dr. Ansel Barthowsky, Let Propulsion Laboratory   Dr. Michael Barday, Advanced Thermal Batteries, Lot Power for Remote Loads on Planetary Surfaces   Dr. Michael Barday, Advanced Thermal Batteries, Lot Power for NASA Venus Application   Dr. Michael Barday, Advanced Thermal Batteries, Lot Power for Nasa Venus Application   Dr. Michael Barday, Advanced Thermal Batteries, Lot Power for Venus Aerobot Missions   Dr. William West, Let Propulsion Laboratory   Dr. William West, Let Propulsion Laboratory   Dr. William West, Let Propulsion Laboratory   Session Chair: Dr. Jonathan Grandidier, Blue Origin   Session Chair: Dr. Jonathan Grandidier, Blue Origin   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan McCop Hull Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan McCop Hull Paul Jones, Let Propulsion Laboratory   Session Chair: Dr. Johan McCop Hull Paul Jones, Let Propulsion Laboratory   Primary Cell and Battery Model   Mr. Frank Zalar, Comeratione Research Group, Inc.   September   Se	11:30 - 11:55	Architecture and Power Transfer for Fission Surface Power System				
Dr. Ansel Barchowsky, Let Propulsion Laboratory Or. Anmadreza Amirahmadi, Jet Propulsion Laboratory Or. Ahmadreza Amirahmadi, Jet Propulsion Laboratory Or. Ahmadreza Amirahmadi, Jet Propulsion Laboratory  22:45 - 1:15  Lunch Break  Track 1: Advanced Prower Concepts (Beta-voltaics and Small RTGs)  Session Chair: Dr. Johnshan Grandfider, Blue Origin Go-Chair: Dr. Johnshan, Mara Retearch Center Temperature and Physical Environments Origination Temperature Setavoritat above the Cytherean Surface (HiBEcuS) High-Temperature Betavoritat above the Cytherean Surface (HiBEcuS) Temperature Betavoritat above the Cytherean Surface (HiBEcuS) Temperature Betavoritat above the Cytherean Surface (HiBEcuS) Temperature Betavoritation Temperature Betavoritatio		Dr. Christopher Barth, NASA Glenn Research Center	Dr. John-Paul Jones, Jet Propulsion Laboratory			
12:25 - 12:45   Capacitively loaled DC-DC Converters: Enabling very High Power Density Or. Ahmadreza Amirahmadi, let Propulsion Laboratory   Dr. William West, Jet Propulsion Laboratory   Dr. William West, Jet Propulsion Laboratory   Dr. William West, Jet Propulsion Laboratory   Session Chair: Dr. Jonathan Grandidler, Blue Origin   Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory   Session Chair: Dr. Jonathan Grandidler, Blue Origin   Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory   Session Chair: Dr. John-Paul Jones, Jet Propulsion Laboratory   Primary Settleton   John Paul Jones, Jet Propulsion   John Paul Jones, Jet Paul Jon	11:55 - 12:20	Tether Power for Remote Loads on Planetary Surfaces	High Temperature Molten Salt Battery for NASA Venus Application			
Dr. Ahmadreza Amirahmadi, Jet Propulsion Laboratory  Lunch Break  Track 1: Advanced Power Concepts (Beta-voltaics and Small RTGs)  Session Chair: Dr. Jonathan Grandidler, Blue Origin Co-Chair: Dr. Jonathan Grandidler, Blue Origin Co-Chair: Dr. Jonathan Grandidler, Blue Origin Co-Chair: Dr. John-Paul Jones, Jet Propulsion Laboratory Co-Chair: Mr. Thomas Miller, NASA Glenn Research Center Remperature and Physical Environments Dr. Tom Adams, Naval Surface Wafrare Center Crane/Purdue University Tina Adams (Naval Surface Wafrare Center Crane/Purdue University) Pimary Cell and Battery Model Mr. Frank Zalar, Cornerstone Research Group, Inc.  2.05 - 2.30 Advances in Tritum Power Sources and Devices for Deep Space Exploration Dr. Peter Cabayu, City Labs Inc.  2.32 - 255 Dr. John-Poul Jones, Jet Propulsion Laboratory Pimary Cell and Battery Model Mr. Frank Zalar, Cornerstone Research Group, Inc.  2.33 - 255 Dr. John-Poul Jones, Jet Propulsion Laboratory Pimary Cell and Battery Model Mr. Frank Zalar, Cornerstone Research Group, Inc.  2.35 - 3.20 Mall RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, 1et Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Dr. Richies University of Propulsion Laboratory Co-Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory Co-Chair: Dr. Frik Brandon, Jet Propulsion Laboratory Co-Chair: Dr. Frik Brandon, Jet Propulsion Laboratory Mr. Anton Quiror, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Dr. Richard Barchowsky, Jet Propulsion Session Chair: Dr. William West, Jet Propulsion Laboratory Dr. Richard Barchowsky, Jet Propulsion Laboratory Dr. Christian Brandon, Jet Propulsion Laboratory Dr. Christian Bran		Dr. Ansel Barchowsky, Jet Propulsion Laboratory	Dr. Michael Barclay, Advanced Thermal Batteries, Inc.			
Track 1: Advanced Power Concepts (Beta-voltaics and Small RTGs) Session Chair: Dr. Jonathan Grandidier, Blue Origin Co-Chairs Dr. Vladimir Jovovic, Jet Propulsion Laboratory Co-Chairs Mr. Homas Miller, NASA clean Research Center Pemperature and Physical Environments Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering Cato Cato Repending Cato Cato Repending Cato Repend	12:20 - 12:45	Capacitively Isolated DC-DC Converters: Enabling Very High Power Density	Advanced, Wide Operating Temperature Batteries for Venus Aerobot Missions			
Track 1: Advanced Power Concepts (Beta-voltaics and Small RTGs) Session Chair: Dr. Jonathan Grandidier, Blue Origin Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory 4: Session Chair: Dr. John-Paul Jones, Jet Propulsion Laboratory Co-Chair: Mr. Thomas Miller. NASA clenn Research Center Brigh-Energy Dense Betavoltaics for Unattended Operation in Extreme Temperature and Physical Environments Dr. Tom Adams, Naval Surface Warfare Center Crane/Purclue University Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering 2:05 - 2:30 AVANICES in Tritium Power Sources and Devices for Deep Space Exploration Dr. Peter Cabauy, City Labs inc.  2:37 - 2:55 A Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, HI. Zehnology, Inc. 2:55 - 3:20 Mm. High Concept Design for Operation on Surfaces of Venus and Moon Mr. Fice Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory Co-Chair: Dr. William West, Jet Propulsion Laboratory Co-Chair: Dr. William West, Jet Propulsion Laboratory Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory Co-Chair: Mr. Strent Gardner, MASA Glenn Research Center  3:30 - 3:55 - 4:20 A Modular, High-Power, Radiation-Hardened, Dc-Dc Converter with Decentralized Control Mr. Anton Quirox, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Mr. Steven Yallais, Sigma Technologies  3:55 - 4:20 A Modular, High-Power, Radiation-Hardened, Dc-Dc Converter Design Using the TPS/H500 Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Inst		Dr. Ahmadreza Amirahmadi, Jet Propulsion Laboratory	Dr. William West, Jet Propulsion Laboratory			
Track 1: Advanced Power Concepts (Beta-voltaics and Small RTGs) Session Chair: Dr. Jonathan Grandidier, Blue Origin Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory 4: Session Chair: Dr. John-Paul Jones, Jet Propulsion Laboratory Co-Chair: Mr. Thomas Miller. NASA clenn Research Center Brigh-Energy Dense Betavoltaics for Unattended Operation in Extreme Temperature and Physical Environments Dr. Tom Adams, Naval Surface Warfare Center Crane/Purclue University Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering 2:05 - 2:30 AVANICES in Tritium Power Sources and Devices for Deep Space Exploration Dr. Peter Cabauy, City Labs inc.  2:37 - 2:55 A Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, HI. Zehnology, Inc. 2:55 - 3:20 Mm. High Concept Design for Operation on Surfaces of Venus and Moon Mr. Fice Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory Co-Chair: Dr. William West, Jet Propulsion Laboratory Co-Chair: Dr. William West, Jet Propulsion Laboratory Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory Co-Chair: Mr. Strent Gardner, MASA Glenn Research Center  3:30 - 3:55 - 4:20 A Modular, High-Power, Radiation-Hardened, Dc-Dc Converter with Decentralized Control Mr. Anton Quirox, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Mr. Steven Yallais, Sigma Technologies  3:55 - 4:20 A Modular, High-Power, Radiation-Hardened, Dc-Dc Converter Design Using the TPS/H500 Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Inst	12:45 - 1:15	Lunch	l Break			
Session Chair: Dr. Jonathan Grandidier, Blue Origin Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory Session Chair: Dr. John-Paul Jones, Jet Propulsion Laboratory Co-Chair: Dr. Thomas Miller, AASA Glenn Research Center Radiation Effects on LI/CFR Primary Batteries Ms. Hui Li Seong, Jet Propulsion Laboratory Dr. Tom Adams, Naval Surface Variante Center Crane/Purdue University Dr. Tom Adams, Naval Surface Variante Center Crane/Purdue University Dr. Tom Adams, Naval Surface Variante Center Crane/Purdue University Dr. Andrew O'Conno, University of Florida, Department of Materials Science and Engineering Advances in Tritium Power Sources and Devices for Deep Space Exploration Dr. Mario Destephen, EaglePicher Technologies at EaglePicher Dr. John McCoy, Hi-Z Technology, Inc. Dr.						
Co-Chair: Dr. Vladimir Jovovic, Jet Propulsion Laboratory		Track 17 Autorice Force Concepts (See Forcales and Small RFCs)	,			
1.15 - 1.40 High-Energy Dense Betavoltaics for Unattended Operation in Extreme Temperature and Physical Environments Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering Dr. Mario Destephen, EaglePicher Technologies at EaglePicher Dr. Mario Destephen, EaglePicher Technologies at EaglePicher Dr. Advances in Lithium Monofluoride Technologies at EaglePicher Dr. Anario Destephen, EaglePicher Technologies Dr. Christian Junaed, Precision Combustion, Inc. Power Hibernation to Survive the Lunar Night Mr. Nicholas Uguccini, NASA Glenn Research Center Designs and Components)  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center Designs and Components)  Session Chair: Dr. Brik Brandon, Jet Propulsion Laboratory Dr. Brik Brandon, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex		Session Chair: Dr. Jonathan Grandidier, Blue Origin				
1.15 - 1.40 High-Energy Dense Betavoltaics for Unattended Operation in Extreme Temperature and Physical Environments Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering Dr. Mario Destephen, EaglePicher Technologies at EaglePicher Dr. Mario Destephen, EaglePicher Technologies at EaglePicher Dr. Advances in Lithium Monofluoride Technologies at EaglePicher Dr. Anario Destephen, EaglePicher Technologies Dr. Christian Junaed, Precision Combustion, Inc. Power Hibernation to Survive the Lunar Night Mr. Nicholas Uguccini, NASA Glenn Research Center Designs and Components)  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center Designs and Components)  Session Chair: Dr. Brik Brandon, Jet Propulsion Laboratory Dr. Brik Brandon, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex			Session Chair: Dr. John-Paul Jones, Jet Propulsion Laboratory			
1:15 - 1:40   High-Energy Dense Betavoltaics for Unattended Operation in Extreme   Radiation Effects on LI/CFx Primary Batteries   Ms. Hui Li Seong, let Propulsion Laboratory   Ms. Hui Li Seong, let Propulsion Laboratory   High-Temperature and Physical Environments   Ms. Hui Li Seong, let Propulsion Laboratory   High-Temperature Betavoltaic above the Cytherean Surface (HBISCUS)   Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering   Advances in Titlum Power Sources and Devices for Deep Space Exploration   Dr. Peter Cabauy, City Labs Inc.   Advances in Lithium Monofluoride Technologies at EaglePicher   Dr. Mario Destephen, EaglePicher Technologies at EaglePicher   Dr. Mario Destephen, EaglePicher Technologies   High Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Technologies   Miles Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Technologies   Miles Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Technologies   Miles Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Technologies   Miles Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Technologies   Miles Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Dr. Mario Destephen, EaglePicher Dr. Mario Destephen, EaglePicher Technologies   Miles Power Density, Methane-Fueled, Solid Oxide Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Dr. Mario Destephen, EaglePicher Primary Fuel Cell   Dr. Mario Destephen, EaglePicher Primary Fue						
Dr. Tom Adams, Naval Surface Warface Center Crane/Purdue University  High-Temperature Betavoltaic above the Cytherean Surface (HIBISCUS) Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering  2:05 - 2:30  Advances in Tritlum Power Sources and Devices for Deep Space Exploration Dr. Peter Cabauy, City Labs Inc.  Advances in Tritlum Power Sources and Devices for Deep Space Exploration Dr. Peter Cabauy, City Labs Inc.  Advances in Lithium Monofluoride Technologies at EaglePicher Dr. Mario Destephen, EaglePicher Technologies  Advances in Lithium Monofluoride Technologies  Advances in Lithium Mono	1:15 - 1:40	High-Energy Dense Betavoltaics for Unattended Operation in Extreme				
1.40 - 2:05    Nigh-Temperature Betavoltaic above the Cytherean Surface (HillsCus)   Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering   Mr. Frank Zalar, Cornerstone Research Group, Inc.		Temperature and Physical Environments	-			
Mr. Andrew O'Connor, University of Florida, Department of Materials Science and Engineering 2:05 - 2:30  Advances in Tritium Power Sources and Devices for Deep Space Exploration Dr. Peter Cabauy, City Labs Inc.  2:30 - 2:55  Al Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, H-Z Technology, Inc.  2:55 - 3:20  Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory Aborates and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Dr. Servik Brandon, Jet Propulsion Laboratory Co-Chair: Dr. Servik Brandon, Jet Propulsion Laboratory Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Dr. Christopher Greer, The Pennsylvania State University  4:20 - 4:45 High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  Aria Salador Aria Salador Aria Eric Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  Dr. Erik Johnson, Texas Instruments  Dr. Firk Johnson, Texas Instruments  Dr. Richard Blair, Florida Space Institute, University of Central Florida Applications Applicatio		Dr. Tom Adams, Naval Surface Warfare Center Crane/Purdue University				
Engineering  2:05 - 2:30 Advances in Tritium Power Sources and Devices for Deep Space Exploration Dr. Advances in Lithium Monofluoride Technologies at EaglePicher Dr. Advances in Lithium Monofluoride Technologies  2:30 - 2:55 A Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, Hi-Z Technology, Inc.  2:55 - 3:20 Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  8 Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  8 Track 2: Advanced Power Concepts (Chemical Heat/Power Sources) Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center Optimizing Mass and Efficiency in Distributed Power Systems Mr. Shelly Sposato, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Mr. Steven Yializis, Sigma Technologies  4:20 - 4:35 Mr. Steven Yializis, Sigma Technologies Mr. Sand Optimizing Mass and Efficiency Apogee Semiconductor and Dr. Alex Hanson, University of Texas Dr. Christopher Greer, The Pennsylvania State University of Central Florida Mr. Revin Estala-Rodriguez, The University of Texas at El Paso Dr. Erik Johnson, Texas Instruments Mr. Salakat Dey, Arizona State University Mr. Pennsylvania State University Mr. Pennsylvania State University Mr. Pennsylvania State University Mr. Pennsylvania State University Mr. Salakat Dey, Arizona State University	1:40 - 2:05	High-Temperature Betavoltaic above the Cytherean Surface (HIBIsCuS)	Primary Cell and Battery Model			
2:05 - 2:30 Advances in Tritium Power Sources and Devices for Deep Space Exploration Dr. Peter Cabauy, City Labs Inc.  2:30 - 2:55 A Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, Hi-Z Technology, Inc.  2:55 - 3:20 Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory Designs and Components)  3:20 - 3:30 Break  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory  Co-Chair: Mr. Pernt Gardner, NASA Glenn Research Center  3:30 - 3:55 Optimizing Mass and Efficiency in Distributed Power Systems Mr. Shelly Sposato, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  4:20 - 4:45 High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies Mr. Sellum Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Spications Mr. Sellum Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Spications Mr. Sellum Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Spications Mr. Sellum Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Spications Mr. Sellum Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Spications Mr. Sellum Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Mr. Salkat Dey, Arizona State University		Mr. Andrew O'Connor, University of Florida, Department of Materials Science and	Mr. Frank Zalar, Cornerstone Research Group, Inc.			
Dr. Peter Cabauy, City Labs Inc.  Dr. Mario Destephen, EaglePicher Technologies  2:30 - 2:55 A Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, Hi-Z Technology, Inc.  2:55 - 3:20 Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  Break  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory  Co-Chair: Dr. Brent Gardner, NASA Glenn Research Center  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Shelly Sposato, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  Mr. Steven Yializis, Sigma Technologies  Mr. Steven Yializis, Sigma Technologies  Mr. Stevan Yializis, Sigma Technologies  Mr. Sevas Instruments Dr. Erik Johnson, Texas Instruments Mr. Selaks Dey, Arizona State University Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Salkat Dey, Arizona State University Dr. Erik Anders Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Mr. Salkat Dey, Arizona State University Dr. Salkat Dey, Arizona State University Dr. Asaleader Rattner, The Pennsylvania State University		Engineering				
2:30 - 2:55  A Highly Shock-Tolerant, Single-RHU RPS Dr. John McCoy, Hi-Z Technology, Inc.  Dr. Christian Junaedl, Precision Combustion, Inc.  Power Hibernation to Survive the Lunar Night  Mr. Nicholas Uguccin, NASA Glenn Research Center  Track 1: Power Concepts (Chemical Heat/Power Sources)  Track 1: Power Con	2:05 - 2:30	Advances in Tritium Power Sources and Devices for Deep Space Exploration	Advances in Lithium Monofluoride Technologies at EaglePicher			
Dr. John McCoy, Hi-Z Technology, Inc.  2:55 - 3:20 Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  3:20 - 3:30  Break  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  3:30 - 3:55 Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Shelly Sposato, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Mr. Steven Yializis, Sigma Technologies  4:42 - 4:45 Mr. Seven Yializis, Sigma Technologies  5:10 - 5:35 Design and Optimizating Mass and Efficiency in a Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University Mr. Saikat De		Dr. Peter Cabauy, City Labs Inc.	Dr. Mario Destephen, EaglePicher Technologies			
Dr. John McCoy, Hi-Z Technology, Inc.  2:55 - 3:20 Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  3:20 - 3:30  Break  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  3:30 - 3:55 Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Shelly Sposato, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Mr. Steven Yializis, Sigma Technologies  4:42 - 4:45 Mr. Seven Yializis, Sigma Technologies  5:10 - 5:35 Design and Optimizating Mass and Efficiency in a Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University Mr. Saikat De	2:20 - 2:55	A Highly Shock Tolorant Single PHILDDS	High Power Density Methane Fueled Solid Ovide Primary Fuel Cell			
2:55 - 3:20 Small RTG Concept Design for Operation on Surfaces of Venus and Moon Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  Break  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Mr. Steven Yializis, Sigma Technologies  4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 P. Erik Johnson, Texas Instruments Mr. Saikat Dey, Arizona State University Mr. Saikat Dey, Arizona State University Mr. Saikat Dey, Arizona State University Mr. Alexander Rattner, The Pennsylvania State University Mr. Salkat Dey, Arizona State University Dr. Alexander Rattner, The Pennsylvania State University Dr. Alexander Rattner, The Pennsylvania State University Dr. Alexander Rattner, The Pennsylvania State University of Central Florida Dr. Alexander Rattner, The Pennsylvania State University	2.30 - 2.33		·			
Mr. Eric Poliquin, Jet Propulsion Laboratory and Dr. Michael Durka, Jet Propulsion Laboratory  Break  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory  Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  3:30 - 3:55  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Spoasto, Jet Propulsion Laboratory  Ms. Shelly Spoasto, Jet Propulsion Laboratory  Decentralized Control Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  4:20 - 4:45  High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  4:45 - 5:10  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Mr. Saikat Dey, Arizona State University  Mr. Saikat Dey, Arizona State University Dr. Alexander Rattner, The Pennsylvania State University	2:55 - 3:20					
Laboratory  3:20 - 3:30  Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  3:30 - 3:55  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory Shelly Sposato, Jet Propulsion Laboratory Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  A:20 - 4:45  High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  4:45 - 5:10  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 For Eith Johnson, Texas Instruments  Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Dr. Alexander Rattner, The Pennsylvania State University  Progress Towards Additively Manufactured High Temperature Radiators with Integrated the Tipe Pennsylvania State University  Dr. Alexander Rattner, The Pennsylvania State University	2.55 5.20					
Track 1: Power Conversion, Switching and Transfer (Power Converter Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Madison Hunter, Jet Propulsion Laboratory Ms. Metal Electrical Power Source (CHIPS) Ms. Madison Hunter, Jet Propulsion Laboratory Ms. Metal Electrical Power Source (CHIPS) Ms. Madison Hunter, Jet Propulsion Laboratory Ms. Metal Electrical Power Source			Will Wellous ogucelli, Wish Gelli Research center			
Designs and Components)  Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory  Beat and Electrical Power for Surviving the Lunar Night: The Chemical Heat Integrated Power Source (CHIPS) Ms. Madison Hunter, Jet Propulsion Laboratory  Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Dr. Christopher Greer, The Pennsylvania State University  4:20 - 4:45 High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Sp Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments  Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Salkat Dey, Arizona State University  Dr. Alexander Rattner, The Pennsylvania State University Dr. Alexander Rattner, The Pennsylvania State University Dr. Alexander Rattner, The Pennsylvania State University Dr. Alexander Rattner, The Pennsylvania State University	3:20 - 3:30	,	eak			
Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory  3:30 - 3:55 Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Shelly Sposato, Jet Propulsion Laboratory  Andollar, High-Power, Radiation-Hardened, DC-DC Converter with Decentralized Control Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Dr. Christopher Greer, The Pennsylvania State University  4:20 - 4:45 High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University Dr. Alexander Rattner, The Pennsylvania State University		Track 1: Power Conversion, Switching and Transfer (Power Converter	Track 2: Advanced Power Concepts (Chemical Heat/Power Sources)			
Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  3:30 - 3:55 Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory Ms. Madison Hunter, Jet Propulsion Laboratory Ms. Metal Fueled, Chemical Heat and Power Sources and Conversion Cycles for Extreme Environment Planetary Landers Dr. Christopher Greer, The Pennsylvania State University  4:20 - 4:45 Mr. Steven Yializis, Sigma Technologies Mr. Steven Yializis, Sigma Technologies Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University		Designs and Components)				
Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center  3:30 - 3:55  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  Mr. Steven Yializis, Sigma Technologies  4:45 - 5:10  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments  Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Heat and Electrical Power for Surviving the Lunar Night: The Chemical Heat Integrated Power Sources (CHIPS) Ms. Madison Hunter, Jet Propulsion Laboratory  Metal Fueled, Chemical Heat and Power Sources and Conversion Cycles for Extreme Environment Planetary Landers Dr. Christopher Greer, The Pennsylvania State University  Oxidation and Combustion of Magnesium and Lithium Powders for Space Power Applications Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Energy-Dense Pyrolant Mixtures as Heat and Energy Sources for Future Space Missions Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida and Dr. Applications Mr. Saikat Dey, Arizona State University  Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University			Session Chair: Dr. William West, Jet Propulsion Laboratory			
3:30 - 3:55  Optimizing Mass and Efficiency in Distributed Power Systems Ms. Shelly Sposato, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Metal Fueled, Chemical Heat and Power Source (CHIPS) Ms. Madison Hunter, Jet Propulsion Laboratory  Metal Fueled, Chemical Heat and Power Sources and Conversion Cycles for Extreme Environment Planetary Landers Decentralized Control Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas Dr. Christopher Greer, The Pennsylvania State University  4:20 - 4:45  High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  Mr. Sevin Estala-Rodriguez, The University of Texas at El Paso  4:45 - 5:10  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP. Rediation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Metal Fueled, Chemical Heat and Power Sources and Conversion Cycles for Extreme Environment Planetary Development Space Power Applications Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Bergy-Dense Pyrolant Mixtures as Heat and Energy Sources for Future Space Missions Mr. Kevin Estala-Rodriguez, The University of Central Florida and Dr. Subith Vasu, University of Central Florida and Dr. Subith Vasu, University of Central Florida  Bergy-Dense Pyr		Session Chair: Dr. Ansel Barchowsky, Jet Propulsion Laboratory	Co-Chair: Dr. Erik Brandon, Jet Propulsion Laboratory			
Ms. Shelly Sposato, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Ms. Madison Hunter, Jet Propulsion Laboratory  Metal Fueled, Chemical Heat and Power Sources and Conversion Cycles for Extreme Environment Planetary Landers  Dr. Christopher Greer, The Pennsylvania State University  4:20 - 4:45  High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  Mr. Steven Yializis, Sigma Technologies  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  4:45 - 5:10  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Sp. Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments  Dr. Erik Johnson, Texas Instruments  Dr. Bisign and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Dr. Alexander Rattner, The Pennsylvania State University		Co-Chair: Mr. Brent Gardner, NASA Glenn Research Center				
Ms. Madison Hunter, Jet Propulsion Laboratory  A Modular, High-Power, Radiation-Hardened, DC-DC Converter with Decentralized Control Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  A High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  A:45 - 5:10  Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments  Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Mr. Saikat Dey, Arizona State University  Dr. Alexander Rattner, The Pennsylvania State University	3:30 - 3:55	Optimizing Mass and Efficiency in Distributed Power Systems	Heat and Electrical Power for Surviving the Lunar Night: The Chemical Heat			
A Modular, High-Power, Radiation-Hardened, DC-DC Converter with Decentralized Control Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  4:20 - 4:45 High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  A Modular, High-Power, Radiation-Hardened, DC-DC Converter with Extreme Environment Planetary Landers Dr. Christopher Greer, The Pennsylvania State University Dxidation and Combustion of Magnesium and Lithium Powders for Space Power Applications Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso Energy-Dense Pyrolant Mixtures as Heat and Energy Sources for Future Space Missions Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University		Ms. Shelly Sposato, Jet Propulsion Laboratory	Integrated Power Source (CHIPS)			
Decentralized Control Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  4:20 - 4:45 High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  A:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Erik Johnson, Texas Instruments Dr. Beingn and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Extreme Environment Planetary Landers Dr. Christopher Greer, The Pennsylvania State University Dx. Alexander Rattner, The Pennsylvania State University Dx. Christopher Greer, The Pennsylvania State University						
Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas  4:20 - 4:45  High Energy Density Solid Stare Polymer Capacitors for Space Applications Mr. Steven Yializis, Sigma Technologies  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Mr. Kevin Estala-Rodriguez, The University of Central Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida and Dr. Subith Vasu, University of Central Florida  Togress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks  Mr. Saikat Dey, Arizona State University  Dr. Alexander Rattner, The Pennsylvania State University	3:55 - 4:20		·			
4:20 - 4:45  A:20			,			
Mr. Steven Yializis, Sigma Technologies  Applications Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  4:45 - 5:10 Applications Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  Bergy-Dense Pyrolant Mixtures as Heat and Energy Sources for Future Space SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University		Mr. Anton Quiroz, Apogee Semiconductor and Dr. Alex Hanson, University of Texas	Dr. Christopher Greer, The Pennsylvania State University			
Mr. Steven Yializis, Sigma Technologies  Applications Mr. Kevin Estala-Rodriguez, The University of Texas at El Paso  4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Mr. Saikat Dey, Arizona State University  Applications Mr. Revin Estala-Rodriguez, The University of Texas at El Paso Missions Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University	4:20 - 4:45	High Energy Density Solid Stare Polymer Capacitors for Space Applications	Oxidation and Combustion of Magnesium and Lithium Powders for Space Power			
4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Energy-Dense Pyrolant Mixtures as Heat and Energy Sources for Future Space SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University Dr. Alexander Rattner, The Pennsylvania State University			=			
4:45 - 5:10 Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001 Energy-Dense Pyrolant Mixtures as Heat and Energy Sources for Future Space SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University			1 ''			
SP Radiation-Hardened PWM Controller Dr. Erik Johnson, Texas Instruments Dr. Erik Johnson, Texas Instruments Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr. Subith Vasu, University of Central Florida  5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University Dr. Alexander Rattner, The Pennsylvania State University	4:45 - 5:10	Gallium Nitride-Based Space Grade DC/DC Converter Design Using the TPS7H5001				
Subith Vasu, University of Central Florida  5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Mr. Saikat Dey, Arizona State University  Subith Vasu, University of Central Florida  Progress Towards Additively Manufactured High Temperature Radiators with Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University		, , , , , , , , , , , , , , , , , , , ,				
5:10 - 5:35 Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Applications Mr. Saikat Dey, Arizona State University  Design and Optimization of an Isolated Three-Port DC-DC Converter for Space Integrated Heat Pipe Networks Dr. Alexander Rattner, The Pennsylvania State University		Dr. Erik Johnson, Texas Instruments	Dr. Richard Blair, Florida Space Institute, University of Central Florida and Dr.			
ApplicationsIntegrated Heat Pipe NetworksMr. Saikat Dey, Arizona State UniversityDr. Alexander Rattner, The Pennsylvania State University			Subith Vasu, University of Central Florida			
Mr. Saikat Dey, Arizona State University  Dr. Alexander Rattner, The Pennsylvania State University	5:10 - 5:35	Design and Optimization of an Isolated Three-Port DC-DC Converter for Space	Progress Towards Additively Manufactured High Temperature Radiators with			
		Applications	Integrated Heat Pipe Networks			
5:35 - 5:40   Final Announcements & Adjourn   Final Announcements & Adjourn						
	5:35 - 5:40	Final Announcements & Adjourn	Final Announcements & Adjourn			