

SUNDAY OCTOBER 01

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| 18:00 - 20:00 | Welcome Cocktail (pre-Registration) Archaeological Museum Elche | 18:00 - 20:00 |
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MONDAY OCTOBER 02

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| 9:00 - 10:40 | Tutorial: SURFACE power delivery, the future of High-Performance Computing <i>José A. Cobos (UPM, Differential Power)</i> Main auditorium | Tutorial: Solar cells for space application & Nuclear power <i>Stephen Taylor (ESA), Christophe Fongland (ESA)</i> Conference room | Tutorial: Space Debris Mitigation Standard Evolution and impact on power design subsystem <i>Sara Morales (ESA)</i> Room S1 | 9:00 - 10:40 |
| 10:40 - 11:10 | Special Coffee Break courtesy of Microchip Exhibition Hall | | | 10:40 - 11:10 |
| 11:10 - 12:50 | Tutorial: Common failures reference catalogue <i>Ferdinando Tonicello (ESA)</i> Main Auditorium | Tutorial: Solar cell degradation in space due to particle irradiation <i>Carsten Baur (ESA)</i> Conference room | Tutorial: Development of new technologies matching European regulations on materials <i>Ugo Lafont (ESA)</i> Room S1 | 11:10 - 12:50 |
| 13:00 - 14:30 | Lunch Hotel Huerto del Cura | | | 13:00 - 14:30 |
| 14:45 - 15:00 | Inaugural Speech from Conference Chair, City Council and UMHE <i>Véronique Ferlet-Cavrois - ESPC 2023 Conference Chair - European Space Agency</i> <i>Pablo Ruz Villanueva - Major City of Elche</i> <i>Juan José Ruiz Martínez - Chancellor University Miguel Hernández de Elche</i> Main Auditorium | | | 14:45 - 15:00 |
| 15:00 - 15:40 | Plenary session chaired by Véronique Ferlet-Cavrois and Ferdinando Tonicello (ESA) Plenary talk 1: The Artemis I mission (1st part). Power system of the Service Module (2nd part). <i>Carlos Garcia-Galán (NASA) and Arturo Fernández (ESA)</i> Main Auditorium | | | 15:00 - 15:40 |
| 15:40 - 16:10 | Plenary talk 2: Challenges of human and robotics space exploration <i>Stéphanie Lizy - Destrez (ISAE-SUPAERO)</i> Main Auditorium | | | 15:40 - 16:10 |
| 16:10 - 16:40 | Plenary talk 3: Photovoltaics on Earth vs. Space <i>Andreas Bett (Fraunhofer ISE)</i> Main Auditorium | | | 16:10 - 16:40 |
| 16:40 - 17:00 | Special Coffee Break courtesy of Microchip Exhibition Hall | | | 16:40 - 17:00 |
| 17:00 - 18:20 | Plenary talk 4: Historic evolution of the Power System for Space application in Europe <i>Moderated by José Antonio Carrasco (UMHE) and Ferdinando Tonicello (ESA)</i> <i>Alan Weinberg (former ESA), Ed Bongers (former Airbus DS Netherlands), Albert Crausaz (former ESA), Geoffrey Dudley (former ESA)</i> Main Auditorium | | | 17:00 - 18:20 |
| 18:20 - 20:20 | Exhibition Cocktail Exhibition Hall | | | 18:20 - 20:20 |

TUESDAY OCTOBER 03

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| 9:00 - 10:40 | System 1 (MO1a) <i>Nicolas Neugnot (ADS)</i> Main auditorium | Solar array performance and design (I) (GO1) <i>Emanuele Ferrando (SpaceTech GmbH), Rainer Müller (ADS)</i> Conference room | Components 1 (MO1b) <i>Sven Landstroem (ESA)</i> Room S1 | BATTERIES - Cells and Materials Part 1 (EO1) <i>Vanessa Armel (Saft), Rachel Buckle (ABSL Space Products)</i> Room S2 | 9:00 - 10:40 |
| | Quasi-Regulated bus for deep space missions <i>Daniele Renzoni (OHB)</i> | Design and development of JUICE Solar array <i>Martin Kroon (ADS)</i> | TPS7H1111-SP 1.5-A, Ultra-Low Noise, High PSRR Radiation Hardened Low Dropout Linear Regulator <i>Kyle Rakos (TI)</i> | Dual phase high entropy oxide based on AlFeCoNiCu as advanced anode material for lithium-ion batteries with self-healing properties <i>David Csik (Slovak Academy of Sciences)</i> | |
| | Europa Clipper Power Subsystem Implementation and Lessons Learned <i>Brandon Burns (JPL)</i> | MSR-ERO Solar Array <i>Jens Müller (ADS)</i> | Impact of Single Event Effects on Modern COTS DC-DC Buck Converter ICs <i>Philipp Mand (ESA)</i> | Design of advanced niobium pentoxide anodes for Lithium-ion batteries operating at low-temperature conditions <i>Asenbauer Jakob (ESA)</i> | |
| | High voltage power bus: solar array power conversion and power distribution <i>Ausias Garrigos (Elche University)</i> | The Plato Sunshield Solar Array <i>Stefano Riva (Beyond Gravity)</i> | Impact of Radiation on a GaN FET capable PWM Controller IC Prototype for Space Applications <i>Volodymyr Burkhay (SpaceIC)</i> | CFx_MnO2 hybrid cathode for Lithium primary batteries used in landers <i>Louise Dauga (University Clermont Auvergne)</i> | |
| | A Power Engineer View on Space Based Solar Power <i>Henri Barde (ESA retiree)</i> | Consistent approach of predicting the degradation of solar cells due to particle irradiation <i>Carsten Baur (ESA)</i> | GR716B: mixed-signal rad-hard microcontroller for switching power and motor control <i>Mikael Ekström (Frontgrade Gaisler)</i> | | |
| 10:40 - 11:10 | Special Coffee Break courtesy of SpaceTech GmbH Exhibition Hall | | | | 10:40 - 11:10 |
| 11:10 - 12:50 | DCDC 1 (MO2a) <i>Giulio Simonelli (ESA)</i> Main auditorium | Solar array performance and design (II) (GO2) <i>David Lackner (Fraunhofer), Paolo Fidanzati (Leonardo)</i> Conference room | EP 1 (MO2b) <i>Matthias Gollor (ESA)</i> Room S1 | BATTERIES - Cells and Materials Part 2 (EO2) <i>Aurore Carre (ESA), Jakob Asenbauer (ESA)</i> Room S2 | 11:10 - 12:50 |
| | On the design of sequentially switched DCX converters for solar array regulation: S3ZVZCS <i>Carlos Orts (University of Elche)</i> | HERA Photovoltaic Assembly - low intensity characterisation of large area triple-junction solar cells <i>Giorgio Tesser (Leonardo)</i> | Analysis and Design of a Radio Frequency Generator for Gridded Ion Technology Thruster <i>Miguel Astudillo Martínez (UPM)</i> | High energy density solid state batteries based on Li metal anode <i>Armel Vanessa (Saft)</i> | |
| | bPOL48V, a rad-hard 48V DC/DC Converter for Space and HEP Applications <i>Nils van der Blij (CERN)</i> | High efficiency solar array for high power solar electric propulsion missions <i>Martin Kroon (ADS)</i> | Evaluation of the Qucs Software for MSR-ERO Electric Propulsion Power Processing Assembly Modelling and Design Check <i>Dominique Nicolas (ESA)</i> | High Specific Energy VL10ES cell qualification status <i>Yannick Borthomieu (Saft)</i> | |
| | Low Voltage, High Current Power Converter for High Power Integrated Circuit <i>Patrick Dubus (ISD SA Greece)</i> | Development of Solarflex and testing of Engineering Model <i>Eric Garcin (TAS)</i> | Comparative of different Direct Drive architectures <i>Pablo Fernandez Miaja (University of Oviedo)</i> | VES16 - Cell and Battery Safety <i>Jacky Clemente (Saft)</i> | |
| 13:00 - 14:30 | Lunch Hotel Huerto del Cura | | | | 13:00 - 14:30 |
| 14:45 - 16:00 | Round Table: Power and SAVOIR reference architecture and interfaces <i>F. Tonicello (ESA)</i> Main auditorium | Round Table: Future solar cells for space <i>A. Caon (ESA), S. Taylor (ESA), C. Baur (ESA)</i> Conference room | Round Table: Space Fuel Cell, Electrolyser and Regenerative Fuel Cell - Nuclear in Space <i>B. Buegler (ESA), C. Fongarland (ESA)</i> Room S2 | | 14:45 - 16:00 |
| 16:00 - 16:20 | Special Coffee Break courtesy of SpaceTech GmbH Exhibition Hall | | | | 16:00 - 16:20 |
| Poster Session Chaired by David Marroquí (UMHE) Outside of Conference Centre | | | | | |
| Power Management | | Power Generation | Power Storage and Nuclear | | |
| Smart Battery Modules for distributed electrical power systems | | Quantitative photoluminescence inspection of solar cells and photovoltaic assemblies for quality assurance in space applications | | SPARK, a supercapacitor-based pyrotechnic actuator dedicated to extreme environments | |

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| 16:20 - 18:00 | Modular Power Conditioning and Distribution Unit within the Advanced Data & Power Management System | About why the argument that claims that the electric field in a pn junction is the responsible of the photovoltaic effect is wrong | Pouch cell in space behaviour assessment | 16:20 - 18:00 |
| | MicroSADA-18 development of one axis solar array drive mechanism for small satellites | SmallSat Solar Array Product Line at Hemia | Overview of the development of Graphene-based energy storage from material to system level | |
| | HERA EPS Design Challenges | INTEGRAL: Solar Array in-orbit performance analysis and power prediction | VL10ES Batteries Safety Test | |
| | High Voltage on PCB study | First Flight of a New Test Facility for Solar Cell Characterization in the Stratosphere | Off-The-Shelf (OTS) 28V battery for rockets and small-sats | |
| | Flexible base power and isolation unit for robotic payloads | Electrical Performance Results of multi-junction space solar cells under High Temperature High Intensity Environmental Conditions | State of health estimation of lithium-ion batteries based on incremental capacity and pulse analysis | |
| | Accurate Controllable 325W Laser Diode Driver for Optical Inter-Satellite Links | Space welding process for terrestrial silicon heterojunctions solar cells | Emerging Applications and Open Challenges for Graphene-based Catalytic Inks for Membrane Electrode Assemblies | |
| | Evolution of in-orbit health management strategy for GEO satellite lithium-ion battery | On the performance and use of the Large Area Multi-junction Solar Array Tester: HighLIGHT SAT | Production of Americium Oxide using the Americium and Plutonium Purification by Extraction Process (AMPPEX) | |
| | ADS SpE Fr - New Space Electronics for OneSat Avionics | Solar Cell Impedance Measurement: leveraging test equipment modernization to obtain equivalent circuit model of multijunction solar Cells | Feasibility evaluation on European Capabilities for 238Pu based radioisotope power systems | |
| | External Battery Charging and Thermal Management for Deep-Space Micro-Satellite: DART & LICIACube Missions | Study of the causes of degradation of space III-V multijunction solar cells at reverse bias operation | Influence of the Thermal Transient Response of Thermoelectric Generators in Maximum Power Point Tracking Algorithms | |
| | Design and Optimization of Reconfigurable High-Voltage Power Supply with Interlock Function | Investigation of thin Poly-Si/SiOx passivated contact p-type silicon cells radiation hardness & annealing | Proof-of-concept of a novel internal heating method using integrated heating wires in a battery electrode | |
| Spacecraft Wireless Solar Array Drive Assembly Based on Magnetically Coupled Wireless Transmission Technology | Adaptive 3J/4J flasher system to measure multi-junction photovoltaics for space applications | | | |
| 18:10 - 20:30 | Touristic visit Elche, courtesy of Elche's City Council Departure from Conference Centre (walking tour) | | | 18:10 - 20:30 |

WEDNESDAY OCTOBER 04

| | System 2 (MO4b) | Solar cells and materials (I) (GO3) | Components 2 (MO3b) | BATTERIES (EO3) | |
|--------------|---|---|---|--|--------------|
| 9:00 - 10:40 | Christian Elisabelae (CNES) Main auditorium | Victor Khorenko (Azur), Navid Fatemi (Rocket Lab) Conference room | Salvo Pappalardo (ST) Room S1 | Aakesh Data (OHB), Yannick Borthomieu (Saft) Room S2 | 9:00 - 10:40 |
| | Statistical Sizing of a Satellite Power Subsystem Manon Huguenin (ADS) | Flexible and Lightweight III-V Space Multijunction Solar Cells with High Power Density Carlos Algora (UPM) | Impact of Radiation on a Point-of-Load IC Prototype for Space Applications Volodymyr Burkhay (SpaceIC) | Li-ion Battery hard passivation Eric Pasquier (Saft) | |
| | Quantitative Comparison of Power Architecture for LEO missions Pilar Mingorance (ESA) | SolAero Space Power Solutions and Product Roadmap Alexander Haas (Rocket Lab) | Adaptation and control of a latching current limiter based on a SiC N-MOSFET Abraham Lopez Antuna (University of Oviedo) | Thermal Batteries as Power Sources for Space Applications Luc Faget (ASB) | |
| | Microsatellite Power System for Deep Space Exploration Cristian Torres Vergara (University of Elche) | Towards high-efficiency ultra-thin GaAs solar cells for space applications. A comparative study of back reflector designs Rosalina van Leest (TF2 Devices) | Impact of Radiation on a Voltage Clamp IC Prototype for Space Applications Volodymyr Burkhay (SpaceIC) | ARTES VL10ES Modular Batteries Hélène Tricot (Saft) | |
| | Modular EPS for small mobile robotic space systems Benjamin Hülsen (DFKI) | Engineered Ge-on-Ge substrates by bipolar electrochemical etching Kristof Dessein (Umicore) | Do not harm; a novel methodology to protect electrical failure propagation, applying safety barriers and using modern and inexpensive power electronics devices. Pablo Hernandez (ESA) | | |

10:40 - 11:10 Coffee Break
Exhibition Hall

| | DCDC 2 (MO4a) | Solar cells and materials (II) (GO4) | Control 1 (MO3a) | BATTERIES - Modelling (EO4) | |
|---------------|--|--|--|--|---------------|
| 11:10 - 12:50 | J.A. Carrasco (UMHE) Main auditorium | Wolfgang Guter (Azur), Mitsuru Imaizumi (Sanja City University) Conference room | Jesus Oliver (ESA) Room S1 | Eloi Klein (TAS), Carl Twaite (ABSL Space Products) Room S2 | 11:10 - 12:50 |
| | Four-switch buck-boost based module block for highly modular power architecture Miguel Fernandez Costales (University of Oviedo) | GaN/P/GaAsP/SiGe Low Ge Alternative Triple Junction for Space Jens Ohlmann (Fraunhofer) | Decentralized Control for a Fault-Tolerant, Fully Scalable Microprocessor Power Supply for Spacecraft Applications Gregory Almeida (INP) | Mars Express Lithium Ion Batteries Performance Update Geoffrey Dudley (ESA retiree) | |
| | Comparison of 100V-28V Switched-Capacitor DC DC Converters Based on Cascaded Buck, Boost and 3-Level Buck Topologies for Space Application Regina Ramos (UPM) | Direct Wafer Bonded and Metamorphic Four-Junction Solar Cells for Space Applications David Lackner (Fraunhofer) | A comparative study on experimental loop gain measurement techniques applied to digitally controlled buck-type power converters Christophe Delepaut (ESA) | Assessing Lifetime, Performance, and Functionality Impact for CubeSat Battery Packs via Modelling Vaclav Knap (Czech Technical University Prague) | |
| | ADS SpE Fr - High Efficiency, Versatile and Space Tolerant Point Of Load Lucien Lecocq (ADS) | A New Generation of Quadruple Junction Solar Cells Victor Khorenko (Azur Space) | Digital controllers design using the ESA Control Toolbox in MATLAB Simulink Angel de Castro (Univ Autonoma Madrid) | Physics-based Multiscale Modelling of Lithium-ion Batteries at Low Temperatures Joao Cunha (INL) | |
| | | Reinforced and Doped Epitaxial layers grown from GeCl4 on reusable germanium substrates for multijunction space solar cells Jinyoun Cho (Umicore) | Digital control for a modular system of DC/DC converters for primary distribution system Pablo Zumel (Universidad Carlos III de Madrid) | | |

13:00 - 14:30 Lunch Hotel Huerto del Cura

| | PCDU 1 (MO6b) | Solar array and materials (III) (GO5) | Electric Propulsion 2 (MO5b) | BATTERIES - Test (EO5) | |
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| 14:45 - 16:00 | Alberto Lazerretti (LDO) Main auditorium | Kristof Dessein (Umicore), Antonio Martí (UPM) Conference room | Andreas Franke (ESA) Room S1 | Yannick Borthomieu (Saft), Jakob Asenbauer (ESA) Room S2 | 14:45 - 16:00 |
| | Future PCDU and PCU for new space Mourad Merabtene (TAS) | In-situ and ex-situ study of protons and electrons irradiations of perovskite solar cells Carla Costa (CEA) | Isolated DC/DC Converter for RF generator of a Power Propulsion Unit: topology comparison based on GaN semiconductors Guillermo Núñez Rodríguez (UPM) | Analysis of Li-ion cells ageing process trough ECM characterization, statistics and Machine-Learning algorithms Desirée Ruiz Ponce (Fundacion Centro Tecnológico) | |
| | Isolated Auxiliary Power Supply Designs Using COTS Components Nils van der Blij (CNES) | Low Sheet Resistance Conductive Coatings For Space Applications Glenn M Jones (Qioptiq Space Technology) | Satellite Electrical Power Subsystem for Direct-Drive Electrical Propulsion Benjamin Spitaels (TAS) | High-precision coulometry used in combination with X-ray imaging and spectroscopy for rapid assessment of lithium-ion batteries fade behavior Alexander Dimitrijevic (UCL/ESA) | |

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| | Microsatellite Solar Array Regulator Digital Twin Development and Validation <i>Pablo Casado Perez (UMHE)</i> | 4 Ways Porous Germanium substrates for Multi-Junction Solar Cells can generate business opportunities for the European Satellite supply chain <i>Bendix De Meulemeester (Umicore)</i> | A Robustness Analysis of PPU Anode Power Supply To Hall-effect Thruster Flickering Phenomenon <i>Dominique Nicolas (ESA)</i> | | |
| | | The silicon heterojunction photovoltaic array: a promising technology for space <i>Romain Cariou (CEA)</i> | | | |
| 16:00 - 16:20 | Coffee Break Exhibition Hall | | | | 16:00 - 16:20 |
| 16:20 - 18:00 | DCDC 4 (MO6a) Hans Jensen (Terma) Main auditorium | Radiation effects on solar cells (GO6) Ana Gras (Inta - Spasolab), Sophie Duzellier (Onera) Conference room | Control 3 (MO5a) Christophe Delepaut (ESA) Room S1 | FUEL CELLS Part 1 (EO6) Brandon Buegler (ESA), Géraldine Palissat (ESA) Room S2 | 16:20 - 18:00 |
| | High Power Density Sequential Switching Shunt Regulator Module <i>Berk Ince (UZAI)</i> | Effective annealing of proton and electron radiation damage in ultra-thin Silicon solar cells <i>Yana Gurimskaya (Solesial)</i> | MPPT Finite-State Supervisor for Electrical Power System Management in LEO Satellites <i>Salvatore Sagnelli (AVIO)</i> | Regenerative Fuel Cell System breadboard for Lunar Night Survival at TRL 4+ (2019-2022) <i>Dmitry Bokach (Clara Venture Labs)</i> | |
| | Smart Power Supply for FPGA and SoC <i>Markus Plattner (Engineering Minds Munich)</i> | Irradiation degradation of partly shielded III-V multijunction cells <i>Manuel Wildfeuer (ADS)</i> | An On-line Detection Optimization Method of SSPC Based on Transient Temperature Analysis <i>Yonggang Chen (Academy of Space Tec. Beijing)</i> | Regenerative fuel cells for lunar night survival <i>Alessandro Bacchini (TAS)</i> | |
| | Power Unit for High Power Radars and Altimeters <i>Erik Mache (Advanced Space Power Equipment)</i> | Comprehensive study of performance & defects of Silicon Heterojunction solar cells under electron irradiation <i>Océane Guillot (CEA)</i> | Impacts of distributed power consumption on the power system stability for a huge power satellite <i>Kang Li (Academy of Space Technology Beijing)</i> | Simplifications in Regenerative Fuel Cell Systems enabled by inclusion of a static water vapour feed high pressure PEM electrolyser subsystem <i>Bjarte G. B. Solheim (Clara Venture Labs)</i> | |
| 18:15 - 20:20 | Cocktail, sponsored by Airbus Huerta del Cura | | | | 18:15 - 20:20 |

THURSDAY OCTOBER 05

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| 9:00 - 10:40 | DCDC 3 (MO7a) Erich Strixner (ADS) Main auditorium | In-orbit performance (GO7) Christian Elisabelar (CNES), Gianfelice D'Accolti (ESA) Conference room | Distribution 1 (MO7b) Soren Christensen (Terma) Room S1 | FUEL CELLS Part 2 (EO7) Brandon Buegler (ESA), Géraldine Palissat (ESA) Room S2 | 9:00 - 10:40 |
| | Modular converter analysis and design for the standardization of the power bus in satellites <i>Abraham Lopez Antuna (University of Oviedo)</i> | Galileo Solar Arrays In-orbit Performance Analysis and Power Prediction using PEPS <i>Pier Luigi Coz (ESA)</i> | Comparative analyses of distribution by LCLs and fuses for 100V application <i>Mourad Merabtene (TAS)</i> | High pressure Solid Oxide Electrolysis for Lunar In-Situ Resource Utilisation using a novel nickel-free fuel electrode <i>Ivar Wærnhus (Clara Venture Labs)</i> | |
| | A Comparison of Technologies for the Implementation of Low Voltage, High Current Power Converters for High Power Integrated Circuits <i>Alan Mathewson (ISD Aerospace Ltd)</i> | Calibration of solar cells: CASOLBA 2022s flight review <i>Loris Ibarrart (CNES)</i> | Towards higher current and voltage LCLs <i>David Marroqui (UMHE)</i> | Solid oxide electrolysis of CO2 for in situ resource utilization on Mars <i>Veronika Reckova (Clara Venture Labs)</i> | |
| | On the implementation of a DC-DC Power Supply for Reducing Electromagnetic Interference from Power Converters and Filters <i>José Carrasco (UMHE)</i> | Monitoring the in flight performance of solar arrays for the BepiColombo mission <i>Stephen Taylor (ESA)</i> | LCL performances based on GaN transistors <i>Mourad Merabtene (TAS)</i> | Solid Oxide Fuel Cells for Ice Giant Exploration <i>Ivar Wærnhus (Clara Venture Labs)</i> | |
| | Battery Discharge Regulator based on Weinberg Topology for High Power Communication Satellites <i>Emre Cetin (UZAY)</i> | In flight data of Integral assembled solar cells <i>Roberta Campesato (CESI)</i> | | Membrane Electrode Assemblies Based on Platinum-Cobalt-Ceria Doped Graphene Oxide for PEMFCs Applications <i>Adriana Marinou (ICSJ)</i> | |
| 10:40 - 11:10 | Coffee Break Exhibition Hall | | | | 10:40 - 11:10 |
| 11:10 - 12:50 | GaN 1 (MO8a) Mourad Merabtene (TAS) Main auditorium | Solar array performance and design (III) (GO8) Francesco Faleg (Leonardo), Vicente Diaz (DHV) Conference room | Control 2 (MO8b) Esteban Sanchis (UV) Room S1 | NUCLEAR: Future missions needs innovative applications and products (NO1) Stephanie Barron (ESA), Christophe Fongarland (ESA) Room S2 | 11:10 - 12:50 |
| | High efficiency GaN based Resonant reset Forward Converter with Synchronous rectification for Space applications <i>Miguel Gonzalez (TAS)</i> | SpaceTech Solar Array Experience in Series Production <i>Emanuele Ferrando (Spacetech)</i> | Hardware-In-the-Loop model design using the ESA Control Toolbox in MATLAB Simulink <i>Angel de Castro (Univ. Autonoma Madrid)</i> | Radioisotope Power Sources: A Novel Approach to Ice Mining on the Moon <i>Hannah Sargeant (University of Leicester)</i> | |
| | GaN FET-based, scalable DCDC converter development for space and stratospheric applications <i>László Bagó (C3S LLC)</i> | SolarCube: An origami-inspired lightweight deployable solar panel for nano satellites <i>Alessandro Busicchio (Polytechnic University Bari)</i> | Analog Global MPPT Techniques for Complex I-V Curves <i>Cristian Torres Vergara (UMHE)</i> | Am-241 Powered Dynamic Radioisotope Power System (DRPS) for Long Duration Lunar Rovers <i>Alessandra Barco (University of Leicester)</i> | |
| | GaN Based Solar Power Regulator <i>Andreas Isaksson (ASP)</i> | A deployable membrane-based 100W Solar Array for SmallSats <i>Tom Sprowewitz (German Aerospace Center)</i> | SMPT: a sequential MPPT approach for power bus management in space vehicles <i>Luigi Schirone (Sapienza University of Rome)</i> | Development of a Small Low-Power Radioisotope Thermoelectric Generator Using the General Purpose Heat Source <i>Chris Whiting (University of Dayton)</i> | |
| | | On-orbit Demonstration of Lightweight Solar Array Paddles by Destiny Spacecraft <i>Hiroyuki Toyota (JAXA)</i> | A new generation of MPPT based on GaN for EVO PCDU <i>Pablo Lopez Cenamor (ADS)</i> | PULSAR Project <i>Brieuc Spindler (Tractebel)</i> | |
| 13:00 - 14:30 | Lunch Hotel Huerto del Cura | | | | 13:00 - 14:30 |
| 14:45 - | PCDU 2 (MO9a) Ferdinando Tonicello (ESA) Main auditorium | Solar cells and components testing (GO9) Bernard Boulanger (TAS), Emilio Fernández (ESA) Conference room | System 3 (MO9b) Jon Caudepon (OHB) Room S1 | NUCLEAR: Capabilities and development in Europe (part 1) (NO2) Stephanie Barron (ESA), Christophe Fongarland (ESA) Room S2 | 14:45 - |
| | Innovative COTS Based PCU Solution for Telecommunications Market <i>Pablo Lopez Cenamor (ADS)</i> | High temperature accelerated life tests for GaInP/GaAs/Ge solar cells: forward versus forward-reverse bias <i>Manuel Vásquez (UPM)</i> | Generic High Power System for manned missions to the Moon and beyond <i>Emilio Lapena (ADS)</i> | UK Development of Radioisotope Power Systems (RPS) <i>Gemma Mathers (National Nuclear Laboratory)</i> | |

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| 16:00 | High-Power Modular Power Conditioning and Distribution Unit for an Integrated Microsatellite Avionics Stack <i>Quentin Mannes (DSI)</i> | Assessment of Spectrally Matched Cells <i>Ana Gras (INTA-Spasolab)</i> | Generational Change of EMC Verification in Japanese Spacecraft Power Supply Systems <i>Toru Kasai (JAXA)</i> | Ensuring the safety of European missions with radioisotope power systems <i>Remy Croxatto (ArianeGroup)</i> | - 16:00 |
| | MSR ERO: PCDU & PPU Subsystem <i>Pablo Lopez Cenamor (ADS)</i> | Characterization and early qualification activities on Si planar blocking diodes <i>Emanuele Ferrando (Spacetechn)</i> | On the Electrical Power System of the ASTROBIO CubeSat <i>Luigi Schirone (Sapienza University of Rome)</i> | Research in Support of European Radioisotope Power System Development at the European Commission's Joint Research Centre <i>Daniel Freis (European Commission)</i> | |

16:00 - 16:20 Coffee Break Exhibition Hall 16:00 - 16:20

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| 16:20 - 18:00 | PCDU 3 (MO10a) Pablo Lopez (ADS) Main auditorium | Electrical Propulsion 3 (MO12b) Pablo Lopez (ADS) Main auditorium | Solar array performance prediction (GO10) Claus Zimmermann (ADS), Stefano Riva (Beyond Gravity) Conference room | Units 1 (MO10b) Erik Mache (ASP) Room S1 | NUCLEAR: Capabilities and development in Europe (part 2) (NO3) Stephanie Barron (ESA), Christophe Fongarland (ESA) Room S2 | 16:20 - 17:05 |
| | PLATO PCDU Design with Maximum Power Point Tracking <i>Hans Jensen (Terma)</i> | Understanding and managing solar cell mismatch losses through statistical evaluation and simulation <i>Patrick Hornung (ADS)</i> | Power and Synchronization Unit for Cameras in Space Applications <i>Felice Forrisi (ASP)</i> | Pu238 Production Feasibility in Europe <i>Brieuc Spindler (Tracetebe)</i> | | |
| | A High Voltage and High Power PCDU for Space <i>Xue long Hou (Shenzhen Aerospace New Power Technology)</i> | Power Performance Implications of a Different Binning Strategy <i>Emanuele Ferrando (Spacetechn)</i> | Modular Architecture for a Control Unit for a Martian Robotic Arm <i>Luca Zerilli (Leonardo)</i> | Heat Source Architecture of a Radioisotope Power System within the PULSAR project <i>Benjamin Turquais (CEA)</i> | | |
| | ADS SpE Fr - New Space Modular and Versatile PPU 1 to 20kW <i>Florent Guedon (ADS)</i> | Analysis of solar cells qualification data and their impact on deterministic and statistical approach in the solar array design <i>Pierluigi Coz (ESA)</i> | Centralized Power Supply Unit for Active Antenna RF equipment <i>Miguel Perez (Sener)</i> | Motor 1 (MO12b) Tim Strous (ESA) Room S1 | | |
| | A multifunctional Power Processing Unit (M-PPU) that drives multiple thrusters of different types. <i>Erik Mache (ASP)</i> | | Flexible buck-converter design using the new ST Rad-hard Power MOSFET <i>Giuseppe Camonita (STMicroelectronics)</i> | A Dual Three-Phase DC-Link Inverter Prototype Powering a Redundant Space Robotics Motor Drive <i>Tilman Wimmer (DLR)</i> | 17:05 - 18:00 | |
| | | | Integrated Power Solution for Electrical Motor Control in TVC Actuation Applications <i>Shane O'Donnell (MicroChip)</i> | | | |
| 19:00 - 19:20 | Transport to Hotel Meliá Alicante | | | | 19:00 | |
| 19:20 - 19:30 | From Congress Centre (c/ Eugeni D'Or) to Hotel Meliá Alicante | | | | - 19:20 | |
| 19:30 - 24:00 | Gala Dinner | | | | 19:30 - 24:00 | |
| 24:00 - ... | Transport back to Elche From Hotel Meliá Alicante to Congress Centre (c/ Eugeni D'Or) | | | | 24:00 - ... | |

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| FRIDAY OCTOBER 06 | | | | | |
| 10:15 - 10:45 | Coffee Breakfast Exhibition Hall | | | | 10:15 - 10:45 |
| 10:45 - 12:25 | Battery Electronics (MO11a) Brieuc De Smet (ESA) Main auditorium | Other concepts (Solar Arrays) (GO11) Erminio Greco (CESI), Martin Kroon (ADS) Conference room | Simulation 1 (MO11b) Bruno Samaniego (ESA) Room S1 | GaN 2 (MO12a) Arturo Fernandez (ESA) Room S2 | 10:45 - 12:25 |
| | Development of an Active Battery Management System for Spacecraft <i>Alberto Nunez (Abengoa)</i> | High-Efficiency 1064 nm Metamorphic Photonic Power Converters for Spacecraft Wireless Power Transfer <i>Carmine Pellegrino (Fraunhofer)</i> | Co-simulation of Electrical propulsion and power systems in Direct Drive applications <i>Pablo Fernandez Miaja (University of Oviedo)</i> | GaN based PCDU for MSR ERO Mission <i>Mario Gomez Alonso (ADS)</i> | |
| | The Impact of Modern Battery Cell Technologies on Spacecraft DNEL functionality <i>Tim Strous (ESA)</i> | Manufacturing of a novel micro-concentrator prototype and assessment of its electrical performances <i>Victor Vareilles (CEA)</i> | Fully transient energy balances on EcosimPro <i>Jorge Ruiz Torralba (OHB)</i> | Size and Efficiency Improvements Using GaN FETs <i>Jeremy Ferrell (VPT, Inc.)</i> | |
| | End-of-Life Battery Passivation Management System for Small Satellite Constellations in LEO and GEO <i>Davide Istria (Argotec)</i> | Validating a new solar cell performance prediction tool for space applications against ground tests <i>Soufian Yijou (TRAD Tests & Radiations)</i> | Open-Source GUI for Fast Prototyping of Magnetic Components based on Planar Conductors <i>Alberto Delgado (UPM)</i> | ADS SpE Fr - Multipurpose power cell with GaN FETs for PCU <i>Hugues Colas (ADS)</i> | |
| | A new battery cell simulator and main frame for EGSE Equipment <i>Adam Kiss (Rovsing)</i> | | A complete approach on validating satellite electrical and power sub-system using Systema <i>Camille Sanchez (ADS)</i> | COTS-Based modular BLDC power stage using GaN-FETs for robotic space application <i>Benjamin Hülsen (DFKI)</i> | |
| 13:00 - 14:30 | Farewell Cocktail Hotel Huerto del Cura | | | | 13:00 - 14:30 |