

16th EASN International Conference on
Innovation in Aviation & Space towards sustainability today and tomorrow

Preliminary Agenda

DAY 1 | 27.10.2026

8:30	16:00									
ROOM	Registration									
9:00	9:15	Lecture Hall 1								
		Conference Opening & Welcome Addresses								
9:15	9:45	KEYNOTE SPEECH EXAEUA: pioneering European flying testbeds bed to drastically cut long-range flights' climate impact by 2050 by Mr. Martin Nagelsmit Netherlands Aerospace Center (NLR)								
		Chaired by TBC Conference co-Chairman								
9:45	9:55	Signature of MoU between EUROAVIA and EASN Association								
9:55	10:55	DISCUSSION PANEL Integrating Start-Ups in the European Aerospace Sector and Exploiting them to Enhance Europe's Economy Dr. Marcello Amato EREA, Mr. Andreas Boschen SESAR JU, Mr. Bruno Darboux Airbus & Aerospace-Valley, Mr. Axel Krein Clean Aviation JU								
		Moderated by Prof. Maria Angeles Marín Prats University of Seville, Spain								
10:55	11:25	Coffee Break								
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053	05-059	
Session Title	Experimental Aircraft for European Leadership in Aviation (EXAEUA Project) PART I	Innovation in UAVs: Design, Optimization, Flight Testing and Emerging Technologies PART I	Novel Propulsion Architectures PART I	Hydrogen & Energy Storage PART I	Impact of very fast events and hazards on the sustainability of aerospace structures	Data-Driven Engineering Design for Aerospace Manufacturing and Systems PART I	Certification & Regulatory Frameworks in Aviation	Sustainability and circularity in the design process in aviation	Air Traffic Management (ATM) and Airports Subjects PART I	
Session Chair	Mr. Johan Kas (Netherlands Aerospace Center (NLR), Netherlands)	Prof. Kyros Yakinthos (Aristotle University of Thessaloniki, Greece)	Dr. Ralf von der Bank (Rolls-Royce Deutschland Ltd & Co KG, Germany)	Mr. Peter Simkens (Von Karman Institute for Fluid Dynamics (VKI), Belgium)	Prof. Christine Espinosa (ISAE-SUPAERO, France), Prof. Alain Merlen (Ile University, France) & Prof. Michel Amigoni (ENSTA/IRD, France)	Prof. Timoleon Kipouras (Cranfield University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Prof. Joël Jézégou (ISAE-SUPAERO, France)	Prof. Angelos Filippatos (University of Patras, Greece) & Ms. Ligela Paletti (German Aerospace Center (DLR), Germany)	Prof. Octavian Thor Pieler (University Politehnica of Bucharest, Romania)	
11:25	11:45	Experimental Aircraft for European Leadership in Aviation (EXAEUA): Overview of First Results and Initial Roadmaps Johan Kas, Timeea Pacala, Christoph Mertens	Continuous Bi-directional Trailing Edge Morphing using Hyperelastic Solid Hinges Jan Tikalsky	European aero-engine research policy from NPA Technology Cluster perspective addressing the upcoming 10th Research Framework Programme Ralf von der Bank	Configuration for Optimal Integration of Hydrogen Fuel for a Medium-Range Airplane Vishwanath Nagaraj, Roelof Vos	Inputs for laser solutions for space debris mitigation or space transportation M. Schneider, H. Hichami, S.A.E. Boyer, M. Boustle, M. Arigoni, C. R. Phipps, S. Boujnah, S. Oriol, S. Paolacci-Riera, E. Bartnicki	Learning-based enhancement of augmented Lagrangian coordination for distributed multidisciplinary design optimization Edward Louis, Ahmed Bayoumy, Michael Kokkilaars	Simulation-Based Framework for UAS Operational Risk Assessment and Compliance with EASA and Transport Canada SORA-Based Regulatory Approaches Nazar Sahban, Anna Mazur, Michal Weber Piotr Ginter, Jay Matlock, Patrick Heaney, Alzad Suleman	The impact of circular economy on the future European long-range aircraft L. Paletti, P. Panagiotis, D. Markatos, S. Pantelakis, G. Wende, A. Filippatos	Design and Integration of an AI-Based ATC Communicator within a Digital Co-Pilot for Single Pilot Operations Yasir Mahmood Khan, Marko Radanovic
11:45	12:05	Design of a SAF Long Range BWB in the frame of the European Project EXAEUA J. Gauthier-Ladogay, V. Pissaco, C. Toussaint, A. Trémolet, E. Nguyen Van, S. Defoort, M. Peschmann, P. Brunow, G. Starck, O. Alinaut	Aerodynamic Performance of Droop Leading Edge Aerofoils at Low Reynolds Numbers Shanshan Xiao, Mark Jabbari, Humberto Medina, Mohammadreza Amoozgar	Revolutionary Propulsion: From an idea to a Proven Concept. And Beyond? Arne Seitz	Assessment of Regional to Long-Range LH2-Powered Aircraft with Conformal Wing Tanks Marc Engelmann, Chang Xu, Nils Roth, Barlas Türlülmaz	Aeronautical composite structure dismantling using laser shock processing Bryan Better, Aboultghit El Malki Alaoui, Michel Amigoni, Christine Espinosa, Serge Guetta	Detecting Critical Transitions in Aerospace Technology Systems Using Empirical Dynamic Modeling Massimo Panaratto	Improving Efficiency and Modularity Approach to Address of New Airborne Hardware Samuel Klein	From sustainability criteria and LCA data to priorities for aircraft design: an introductory approach P. L. Y. Léonard, E. A. Amardilhi, S. Güzg, S. L. Holstedt, J. W. Nylander	Experiments with a Low-Cost True North Heading Sensor for General Aviation Cristian Emil Constantinescu, Octavian Thor Pieler, Irina Beatrice Stefanescu
12:05	12:25	Conceptual design of a long-range aircraft with liquid-hydrogen propulsion and a truss braced wing Lucas Kugler, Tobias Hecken, Carsten Liersch, Mauro Minervino, Domenico Quagliarella, Giovanni Andreutti, Frederico Cardoso, Victor Martin Sanchez	Experimental Investigation of corrugated airfoils at low Reynolds numbers Wilm Friedrichs, Michael Ammann, Patrick Jenni, Marius Banica	Challenges for integration of direct LH2 combustion concepts in innovative aircraft layouts Vlahostergios Z., Panagiotou P., Mitsiris D., Yakinthos K.	Design Criteria Definition of Liquid Hydrogen Fuel Systems for Aircraft Application Valentina Vilada Quiceno, Tim Burschky, Jan Hoemisch, Clément Foussat	Numerical modelling of the thermomechanical loading induced by electric fault arc in aeronautical electrical network M.C. Henao Peñaaranda, C. Rond, P. Longere, M. Malatesta	The Value of First-Order Relationships in Decision-Making Process Timoleon Kipouras, Ola Isaksson, Anna-Maria Rivas McGowan	Forecasting the Socioeconomic Impacts of Innovative Air Mobility: A Welfare Assessment Framework Mahdi Gholami, Anna Palaiologou, Kyriaki Daskaloudi, Eva Palaiologou	Eco-Efficiency Assessment of Hydrogen Aircraft APUs Maintenance Strategies: Integrating Economic and Environmental Criteria Dhuruti Jignesh Upadhyay, Ahmad Ali Pohnya, Gerko Wende	GRAPH-DECIDE: A Graph-Based, Multi-Criteria Decision-Support Framework for Air Traffic Management under Delay and Capacity Uncertainty Eliot Concho, Paul Hernandez, Irmeli Strömoupu, Josep Lluis Lariño-Pey
12:25	12:45	Design of Liquid Hydrogen Fuelled Blended Wing Body Aircraft for Long Range Missions Joseph Lok Chun Chan, Craig Lawson, Howard Smith	v-[Re] ₀ -SST parameter and inflow turbulence condition tuning for corrugated airfoils at low Reynolds numbers Marius Banica	Ultrashort and Thin, Slotted Adaptive Nacelle for Ultra-High Bypass Ratio Turbopfans Nicolás García Roca, Nicolas Doué, Nicolas Tantot	Hydrogen strut braced wing aircraft a common ONERA / DLR evaluation and benchmark model Eric Nguyen Van, Lucas Kugler, Michael Kolzelm, Enrico Stragiotti, Dimitrios Glenis, Sebastian Wöhler, Sebastian Defoort	Laser Ablation Propulsion for space debris removal: Impulse generation by aluminum and role of irradiation parameters Battocchio P.	Data-Driven Engineering Design for Aerospace Manufacturing and Systems: Promise vs. Perils Anna-Maria Rivas McGowan, Timothy W. Simpson	Certification of Hydrogen-Powered Aircraft: A Three-Layer Mapping Approach to Address Regulatory Readiness, Knowledge Gaps, and Safety Risks Jeroen Tuljo, Anna Biancolatto, Ferran van Kan, Heider Xavier Nunes, Rui Dinis Ferreira, Vincius Santini Lobo	Value-driven decision-making methodology to identify the best cargo door latching mechanism considering performance, supply chain, sustainability and reliability criteria at the same time Panagiotis Pantelias, Giuseppe Donelli, Carlos Cabañero de la Hoz, Hanno Niemann, Angelos Filippatos, Dionysios Markatos, Luca Boggiero, Björn Nagel	Aggregated metrics for the evaluation of ATM efficiency Gabriele Sfarti, Laurent Joly
12:45	13:05	Modelling and preliminary design of liquid-hydrogen fuel systems for future long-range aircraft Enrico De Betta, Damiano Tormen, Michael Guaglio, Francesco Mastropiero, George Lampeas, Lucas Kugler, Joseph Chan	Performance Investigation of UAV Propellers via Wind Tunnel Testing A. Polychronaki, A. Chasouras, P. Panagiotou	Development of a Hydrogen-Fuelled Opposed-Free-Piston Engine Test Rig for Characterising Performance and NOx Emissions Joseph Harper, Andrew Rolf, Gaurav Singh, Vishal Sethi	Results of the PRECISE Project: Liquid hydrogen fuel quantity indication systems for future aircraft Adrian Winter, Valentin Weing, Ali Aljiev, Yannick Pott, Kay Kochan, Oliver Burkhard	Assessing Post Explosion Conditions in Space Launcher Breakup Scenarios for Debris Prediction Vital F., Bellenoue M.	Structured framework for innovative aircraft design with probabilistic solution spaces using Bayesian networks and the Advanced Morphological Approach Vladislav Todorov, Dmitry Rakov, Andreas Bardenhagen	Certification of Hydrogen-Powered Aircraft: Lessons Learned and Mitigation Strategies for Risk-Informed Development Jeroen Tuljo, Anna Biancolatto, Ferran van Kan, Heider Xavier Nunes, Rui Dinis Ferreira, Vincius Santini Lobo	Assessing Social Impact for Sustainable Aircraft Design through an SLCA Framework D. Markatos, A. Pasquale, S. Pantelakis, A. Filippatos	Predicting Go-Around Likelihood: Towards the Development of an EASA-Compliant AI-Based Decision Support System Alyona Erdogan, Johann Maximilian Christensen, Frank Köster, Elena Hoernemann, Sven Haerlback
13:05	13:25	Retractable Vortex Generators (RVGs) Integration in high lift devices A. Gaz, A. Minervino, F. A. Cardoso, V. M. Sancho	A Fast Design Methodology for eVTOL UAV Propeller Jan Simák, Miroslav Šmíd	Reduced Order Thermodynamic Modeling of an Opposed-Free Piston Engine for a Composite Cycle Gas Turbine Aero Engine Krzysztof Danielek, Joe Harper, Buchan Deneyts Schreiner, Vishal Sethi	Optimised Dished-End Profiles for Lightweight LH2 Tanks: An Analytical-FEA Framework Juan. E. Arjona Rodriguez, Rodrigo Gomez Vazquez, Laurens Tonzer	Modelling of hypervelocity Impacts of debris using a meshless galle-spish limco Anthony Colla, Jérôme Simedee	Adaptive Production Planning in Aerospace Manufacturing through the Integration of Knowledge Graphs, Simulations and Cyber-Physical Systems Thomas Kari, Philip Salivan, Yassine Ghannajou, Jörn Biedermann	Scaffolding Regulatory Compliant Data Products for Aerospace Data Ecosystems Henning Berg, Cansu Tanrikulu, Jonas Klumski, Jérémy Mambini, Achim Hofmann, Kai Lindow	Material Selection for 3D-Printed CubeSat Structural Subsystems Using a Holistic Sustainability T. Kalampakos, N. Raptis, E. Bialas, D. Markatos, A. Filippatos	
13:25	14:30	Lunch Break								
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053	05-059	
Session Title	Experimental Aircraft for European Leadership in Aviation (EXAEUA Project) PART II	Innovation in UAVs: Design, Optimization, Flight Testing and Emerging Technologies PART II	Novel Propulsion Architectures PART II	Hydrogen & Energy Storage PART II	Advanced Technologies for Adaptive, Connected and Resilient Satellite Systems	Data-Driven Engineering Design for Aerospace Manufacturing and Systems PART II	CONCERTO: From Concept to Certification – Overcoming Technical and Regulatory Challenges in Aviation	LCA and LCE in Aviation	Air Traffic Management (ATM) and Airports Subjects PART II	
Session Chair	Mr. Johan Kas (Netherlands Aerospace Center (NLR), Netherlands)	Prof. Kyros Yakinthos (Aristotle University of Thessaloniki, Greece)	Dr. Ralf von der Bank (Rolls-Royce Deutschland Ltd & Co KG, Germany)	Mr. Peter Simkens (Von Karman Institute for Fluid Dynamics (VKI), Belgium)	Prof. Ernestina Ciancia & Prof. Ernesto Limilli (University of Roma "Tor Vergata", Italy)	Prof. Timoleon Kipouras (Cranfield University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Mr. Charles Blondel De Joligny (Dassault Aviation, France)	Ms. Ligela Paletti (German Aerospace Center (DLR), Germany) & Mr. Daniel Kan (Netherlands Aerospace Center (NLR), Netherlands)	Prof. Octavian Thor Pieler (University Politehnica of Bucharest, Romania)	
14:30	14:50	Development of a Modular Flying Testbed for the Demonstration of Innovative Powertrains M. Armbrust, D. P. Bergmann, N. Moebis, A. Ströhmayer	Influence of payload on the design of a solar UAV to achieve year round operations Hayden Myrdland, Ruben E Perez	System-Level Modelling of a Recuperative Cathode Air Supply System for a Composite Cycle Gas-Electric Regional Aircraft T.S. Bakker, F. Ascione, J. Biesheuvel, R. Heukens, A.L. de Boer	Comparative Analysis of Energy Management Strategies for Battery-less Multi-Stack PEMFC Systems in Regional Aviation Bing Ni, Bönsch Camille	Energy-Aware Opportunistic Connectivity for Earth Observation Satellites Using Commercial LEO Megaconstellation Relays M. A. Karim, M. De Sanctis, T. Rossi, E. Ciancia	Utilising AI and LLM for rigorous uncertainty construction Petar Hristov, Alexander Kostadinov, Petar Tomov, Scott Ferson	How standards support innovation in aviation? Alihan Pilgali	Life Cycle Assessment of the HERQUS flying fuel cell Kan DM., Scheers E., De Witte P.J., Vroom M., Reekers M.	Proposal of an enhanced qualitative safety assessment framework for A-to-A HTOL suborbital operations in ATM using a EUROCONTROL-based risk modelling Erico A., Travascio L., Vozella A.
14:50	15:10	Multi-Scale Flying Testbed Strategy for Supporting the Development of Long-Range Liquid Hydrogen Tube-and-Wing Aircraft Ferran van Kan, Kathrin Deck, Andres Jorison, Roger Belletier Claret, Christoph Mertens	Drive Train Architectural Considerations and Design for the DLR High-Altitude Platform Daniel Ackermann, Patrick Juchmann	Test Results for a 500 kW Hydrogen Fuel Cell-Electric Powertrain for Ground Demonstration T. Luten, A.K. Nijenhuis, R.C. van Berthom, D. Vogelsang, A. Pauw, T. Mrzelj, G. Tavcar, S. Posner, R. Schwarz	Thermal-Structural Modelling and Optimization of LH2 Vacuum Insulated Lattice-Core Sandwich Tank I. Valais, C. Gayer, B. Gerhards, K.-U. Schröder	Adaptive Repurposing of Spaceborne Imaging Platforms for Non-Earth Observation Alessia Spedale, Antonio Vito Montalbà	Expert-in-the-loop Explainable Artificial Intelligence to Support Design Engineering Decision Making Szymon Bobek, Grzegorz Nalepa, Timoleon Kipouras	Analysis of regulation gap and risk for disruptive aviation concepts: CONCERTO methodology Joël Jézégou, Alexander Kieß, Sergio Pizzoli, Christel Seguin, Jürgen Arnold, Giovanni Cillo, Eliano Simone	A combined LCA and noise comparison of transportation modes on five typical Intra-European routes J. Beinfemo, L. van Dam, E. Scheers	A Teamwork Assistant for Adaptive Human-AI Collaboration in Air Traffic Management: Findings from the DIALOG Project Marianna Grola, Bertille Soman, Souhir Ezzedini, Maria Emine Nyland, Erik Gesta Nilsson, Morten Smedsrud, Antoine Pultier, Anne-Marie Brouwer, Efecan Yilmaz, Konrad Hagemann, Stefan Tenooit, Serge Piens, Yannick Miglorini, Samy Chikhi, Nicola Cavignello
15:10	15:30	Multiscale Modal BWB FTB Design Benefits and Requirements W. Widjaja, A. Gaz, C. Lawson, C. Villano Muñoz, O. Nistor	Energy harvesting from atmospheric vortices E. Paoullin, J.M. Moschetta, J. Bordenneuve-Gulbé	Design methodology for hydrogen-powered hybrid propulsion system architectures for short-range aviation Daniel Velasco-Perez, Marcos Lopez-Juarez, Ricardo Novella, Josep Gomez-Soriano	Numerical study to assess the crashworthiness of a composite conformal LH2 tank Bram Noordman, Rens Ubbels	Experimental demonstration on a SATCOM modem with anti-jamming Daniele Gaffi	Visual Analytics-Enabled Design Space Exploration of Aircraft Configurations from Top-Level Requirements Shubham S., Spinelli A., Kipouras T.	Towards Certification by Analysis for Aircraft Systems: Early Insights, Challenges and Opportunities from Initial Research Use Cases Florian Jäger, Andreas Schäfer	Introducing a new aerospace-specific life cycle assessment inventory Michael P. Weindold, Achille Laurent	Massive Cherry-Picking Multi-Objective AI Traffic Flow Management Through Lexicographic Optimisation, Trade-Offs, Analysis and Fine-tuning Marcos Moreno Salana
15:30	15:50	On-Ground Common Infrastructure and Data Measurement Approach Supporting EXAEUA Flying Testbed Experimentation A. Vitale, J. Orio, A. Bortel, K. Knepper	System Identification of a Lifting Body Fixed-Wing UAV Under Data Quality Constraints Luke H. Peristy	On the Implementation and Assessment of the Solid and Permeable Fibres Williams-Hawkins Surfaces for Contra-Rotating Open Rotor Aeroacoustics T. Tsoumidis, V. Gkaitandou, P. Oikonomou, V. Gkoutzamanis, A. Kallias	Capacity Scale Effects in Power-to-Liquid Sustainable Aviation Fuel Production: A Techno-Economic and Project-Finance Assessment Kubra Uygun, Hülya Cebeci	Robustness-Driven Design of W-Band GNSS LNA's for Next-Generation Satellite Receivers S. Mostarda, S. Colanigelli, P.E. Longhi, M. Cicconagnani, A. Serrino, E. Limilli	How Much Autonomy Should an Engineering Agent Have? Benchmarking LLM Harnesses for Airworthiness Verification Alejandro Pradas-Gaxton, Atindam Brahmi, Ola Baksson	Damage Models at Multiple Length Scales for Virtual Testing and Qualification/Certification by Analysis Albertino Azeiteiro, Pedro J. Cunha, Denis Dall, Paulo Teixeira Gonçalves	A Novel Life Cycle Impact Assessment Method Tailored to Aviation Emissions Félix Pollet, Thomas Planès	Towards a more flexible ATCO Rostering – key elements, implementation roadmap and alignment with current regulations Michael Finke, Jona Meier, Marco Temme
15:50	16:10	High fidelity static aeroelastic analysis of alleron spanwise effectiveness in flexible HAR wings Andriy Pavlenytsky, Pamela Bugala, Magdalena Gronowska, Pawel Abramowski, Evangelos Filippou, Juri Sadja, Andres Jorison, Huub Timmemans	Influence of Servo Actuator Power Supply on the Modal Characteristics of an Unmanned Patrol Aircraft during Ground Vibration Testing Szczeniak M., Rogalski R., Olejnik A.	Rechargeable Battery-Integrated Islanded Grid Architectures for Highly Electrified Aircraft Andrea Reindl, Georgi Atanasov, Francisco van der Linden	APFEL – Analysis of Fiber-Permeation Properties of Fiber-Reinforced Polymer Composites for High-Pressure Hydrogen Storage under Cyclic Loading Tom Blümel, Rabea Klara Sahr	Dual-Band Ku/Ka Low-Noise Amplifier MMIC Development for Future Flexible Satellite Payloads Parand P., Colanigelli S., Longhi P., Limilli E.	Beyond Visualization: Explainable AI For Complex Data Exploration Raül García Sánchez, Andrea Mancini	Virtual EMA-Base Modal Validation of the CONCERTO Aircraft Actuation Test Bench Alexopoulos Spyridon, Kvelerkioglu Panagiotia, Kostopoulos Vasilis, Lampeas George	Gauging the developments from environmental risk assessment to critical decision support, possibly as life cycle impact assessment, surfaced in simplified life cycle assessment in aeronautics John Simpson, Tosten Moll, Moud Lemagnen	A Numerical Testbed for Analytical Air Traffic Controller Experience Complexity Jana Meier, Marco-Michael Temme, David Seewald
16:10	16:30	Comparative impact assessment of a future long-range aircraft with an entry-info-service in 2050 – Preliminary Assessment Framework & Results T. Pacala, P.Rotei, L. Paletti, D. Markatos, A. Pasquale, A. Filippatos, F. Petrosino, M. Salozzo, J. Page, M. Armbrust, B. Dzielgiet, M. Maczka, B. Peerlings, W.Lammen, E.Scheers, D. Kan, G. Gratton, T. Zili	Strength analysis of the structure of an unmanned water surface-aerial platform that utilizes the wing in the ground effect made of composite materials Gerik Miroslaw Krzyzstof, Rykoczewski Dariusz	Battery Integration in Electric Aviation: A Review of Venting Systems and Strategies Onur Akkol, Lukas Richter, Stefanie de Graaf	CryoTOAD – An Open-Source Cryogenic Tank Thermal model for Overall Aircraft Design Román Jan, Jean-Marc Moschetta	Integrated Evaluation of Radiation, Thermal and Atomic Oxygen Effects on Structural Materials for Low Earth Orbit Satellite Applications Terlan Doğan, İrem Yanık, Sera İllaçoğlu, İknur Boylukoğlu, Hande Girard	On AI-Enabled Quality-Oriented Manufacturing Process Steering Emmanouil Sthathos, Panos Bernardos, George-Christopher Vosniakos	From Kerosene to Hydrogen: Experimental Foundations for Future Aviation Fire Standards Rémi Ballet	Environmental performance of a single-use PET mandrel for one-piece CFRP air inlet ducts: A comparative life cycle assessment Fabian Fish, Sabrina Diniz, Karina Kroos	Operational Validation of Flow-Centric Regulation Planning for Free-factical Air Traffic Flow and Capacity Management Zhengyi Wang, Thinh Hoang, Matteo Cavallotti, Leila Zerrouki
16:30	17:30	Poster Session Tour #1								
17:30	20:00	Students & Young Researchers Networking Event								
End of the 1st Day										

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Preliminary Agenda										
DAY 2 28.10.2026										
8:30	17:30	Registration								
ROOM	Lecture Hall 1									
9:30	10:00	KEYNOTE SPEECH Challenges for the future of avionics by Dr. Denis Bonnet Thales Group								
Chaired by	TBC Conference co-Chairman									
10:00	10:30	Coffee Break								
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053	05-059	
Session Title	ecoDESIGN and Life Cycle Assessment for Hybrid Electric Aircraft PART I	Innovation in UAVs: Design, Optimization, Flight Testing and Emerging Technologies PART III	Innovations in Aerospace Propulsion Systems PART I	Aviation's CO2 and non-CO2 emission. Assessing measuring, predicting, and mitigating impact	Space Robotics – Current and Future Trends in Research and Development	Data-Driven Engineering Design for Aerospace Manufacturing and Systems PART III	Sustainable Smart Composites: Cutting-edge Materials and Innovative Manufacturing Processes	Impact Assessment Studies in Aviation R&I: A Systematic Approach to Evaluating Technological and Operational Innovations	Air Traffic Management (ATM) and Airports Subjects PART III	
Session Chair	Dr. Thomas Reichert & Mr. Peter Brantsch (Fraunhofer-Gesellschaft, Germany)	Prof. Pericles Panagiotou (Aristotle University of Thessaloniki, Greece)	Dr. Christos Mourouzidis (Cranfield University, UK)	Mr. Georgios Bampanis (European Climate, Infrastructure and Environment Executive Agency - CINEA)	Mr. Jonas Eisenmenger & Dr. Wiebke Brinkmann (DFKI GmbH, Germany)	Prof. Timoleon Kipouras (Cranfield University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Prof. Liberata Guadagno & Dr. Raffaele Longo (University of Salerno, Italy)	Mr. Patrick Ratei & Mr. Prajwal Prakash (German Aerospace Center (DLR), Germany)	Prof. Octavian Thor Pieter (University Politehnica of Bucharest, Romania)	
10:30	10:50	Eco-Design and Life Cycle Assessment for Hybrid Electric Aircraft Thomas Felix Reichert, Peter Brantsch, Gabriela Gromer	Airframe Multidisciplinary Design, Analysis and Optimization in Early Design Stages Using a Standardised Parametric Aircraft Description Ögmundur Petersson, Sebastian Deinert	Integrated Multidisciplinary Assessment of Shaft Power Transfer in a UHBR Geared Turbofan Sara Alão, Christos Mourouzidis, Ioannis Roumeliotis, Pavlos Rompokos, Vassilios Pachidis	The UNIC Project: Objectives, Methodology, and Current Progress Ortega I.K., Berthier A.I, Bilyarski D., Crova F., Smallwood G., Owen B., Bellouin N., Crayford A.S, Durand E., Duplissy J., Myllys, N., Rönkkö T., Olenius T., Brown A., Nichman L., Corbin J.C., Jalal N.O., Soukko E., Ntziachristos L., Schripp T.	Overview of AI methods and review of the current state of the art in space applications Mehmed Yüksel, Wiebke Brinkmann, Nayari Marie Lessa, Jonas Eisenmenger, Udo Frese	A data-driven method for smart wind tunnel testing planning Spinelli A., Kipouras T., Greenwell D.	Bridging Recycling Technologies and Material Design: Vitrimers for Sustainable Epoxy Composites Liberata Guadagno, Raffaele Longo, Mariaduligia Raimondo, Luigi Vertuccio, Rosamaria Russo	Enabling End-to-End Aviation Impact Assessment through a Digital Collaborative Framework Andrea Mancini, Marko Alder	Innovation and Sustainability Efforts in Qatar Air Traffic Management and Hamad International Airport Bwalya Junior Chongo
10:50	11:10	High level LCA of low impact aircraft developed in Clean Aviation HERA project Marco Fioriti, Felicia Molinaro	Surrogate-Based Aerostructural Optimization of a Composite Low-Reynolds-Number UAV Wing Spyridon Kilintzidis, Eleftherios Nikolaou, Panagiota Kelverkloglou, Vaios Lappas and Vassilis Kostopoulos	Engine-Aircraft Integrated Design for Hydrogen Propulsion, Application to a Family of Small to Medium Range Aircraft Benoit Said, Christos Mourouzidis, Pavlos Rompokos, Ioannis Roumeliotis, Mohamed Aly Abdel-Raheem	Constraining the impact of volatile particulate matter on contrail cirrus forcing estimates – an output of the A4Climate project Marc E. J. Steffler, Joel Porsonby, Daniel Sauer, Johannes Schneider, Benjamin J. Murray, Jack Macklin, Alexander Vogel, Florian Ungeheuer, Julia David and Christiane Voigt	LunarCobot: Development of Servicing Modules for Multi Robot Operation Scenarios on the Lunar Surface Gewehr M., Al Barwani A., Ben Rajiba, Y., Cai D., Denz T., Gnika L.-N., Käßle J., Kallis N., Koetting C., Lin X., Mallal M., Prang L., Sahli P., Sauerzapf R., Schour J., Wagner H., Weismann S., Zimmermann Z., Klinkner, S.	Interface Design and Digital Twins for Dimensional Control in Composite Assemblies Kristina Wärmefjord, Rikard Söderberg, Diogo Toyoda	Reprocessability by Design: High-Performance Bio-Based Epoxy Vitrimers for Fiber-Reinforced Composites Liberata Guadagno, Francesca Aliberti, Luigi Vertuccio, Mariaduligia Raimondo, Roberto Pantani, Raffaele Longo	Operationalizing Impact Assessment Studies: from Study Definition to Implementation Thierry Lefebvre, Patrick Ratei, Andrea Mancini , Afif Riaz, Michel van Eenige and Afif Junior	Validation of HYCON Multi-Link Architecture for Resilient Surveillance Fadhil Fiyaguna, Lena Kolb, Giancarlo Gelao
11:10	11:30	Analysis on critical and relevant raw materials for hybrid electric aircraft applications Peter Brantsch, Gabriela Gromer	Applicability of Graph Neural Networks on Surface Field Predictions of Subsonic UAV Wings Giorgos Efrem, Chris Pilakos, Pericles Panagiotou	Assessment of Alternative Fuels and Tank Integration Across Aircraft Configurations Sergio Jimeno Allelarea , Utkarsh Gupta, Christos Mourouzidis, Afif Riaz	Environmental impact of a hydrogen-optimised multi-fuel propulsion system (HOPE Project) Feijia Yin, Clémentin Léron, Francesco De Domenico, Arvind Gangoli Rao, Benjamin Percival, Ling Lim, Adnan Muslic and Moritz G. Kolb	Multi-Scenario Optimization of PID and Fuzzy Controllers for Astrobsee Altitude Control Cristian Flores-Rodriguez, Ali Arshadi, Juan Carlos Crespo, Maria Royo, Karl Olfe	Data-driven multiscale modelling of buckling metamaterials for vibration mitigation and protection of airborne electronics Daniel Yago, Diego Abad, Oriol Lloberas-Valls, Javier Oliver, and Juan Cante	Towards Smart Nylon: Electrically Responsive PA6 Composites for Aerospace Applications Guadagno L., Longo R., Aliberti F., Raimondo M., Catauro M., Vertuccio L.	Multi-Fidelity Aircraft Modelling for Integrated Impact Assessment of Technology R&I Afif Riaz, Sergio Jimeno Allelarea, Christos Mourouzidis, Utkarsh Gupta, Felix Brenner, Patrick Ratei	Environmental aspects of the Airport Operations Center: current state and future perspective Inbal Haas, Yves Günther, Jan Knichel, Oliver Pohling, Marcel Pulst
11:30	11:50	Life Cycle Assessment of Aircraft Wing Structures: A Comparative Study of Aluminium and Carbon Fibre Composites Kelverkloglou P., Stavropoulou K., Kilintzidis S., Neumann de la Cruz, Deborah, Rodriguez M., Kostopoulos V., Psaras S.	Aerodynamic shape optimization of airfoils under geometric constraints Ali Arshadi, Dinusha Nethruwan Wijesinghe Wijesinghe Appuhamilage	Towards The Conceptual Design of a Recuperated Rim-Driven Fan Concept Mavroudis Kavvalos, Rainer Schnell, Christian Tiedemann	Latest findings from large passenger aircraft emission measurement campaigns and PACIFIC follow-on activities K. Seeliger, C. Renard, C. Voigt, G. Eckel, T. Grein	Inertial Parameter Identification for the NASA Astrobsee Free-Flyer Ali Arshadi, Cristian Flores-Rodriguez, Maria Royo, Juan Carlos Crespo, Karl Olfe	Determination of material model parameters for composite materials for aircraft structural design using machine learning Q. Abboud, F. Hähnel, J. Markmiller	Towards Greener Aeronautical Composites: The Promise of Electrocutting Liberata Guadagno, Roberto Pantani, Raffaele Longo, Luigi Vertuccio, Francesca Aliberti	Impact Monitor 2: Specification of preliminary impact-assessment studies for new aircraft technologies of Air Transport System and airport level Afif Junior, Michel van Eenige	Multistatic Passive Radar for ATM Surveillance: a simulation study in relevant environments Alberto Arana Ragoel, Martin Ummenhofer, Carla Menciothi, Alexandra Filip-Dhaubadel, Diego Cristallini
11:50	12:10	Environmental Impacts of Sustainable Aviation Fuels and Alternative Energy Vectors: Review of existing Life Cycle Assessment data Ricardo Sendão, Helena Monteiro, Mário Ribeiro, Marco Fioriti	Two-Way Fluid-Structure Interaction Framework for Synthetic Jet Actuator Modelling I. Agrawal, M. Jabbar, A. Popov, J.P. Rouse	CFD-Based Mission-Level Assessment of Powered Engine Installation Effects for Innovative Medium-Range Aircraft Propulsion Odyseas Zogas, Spyridon Antoniou, Pericles Panagiotou	ESCAPE: A transportable contrail chamber Duplissy J., Koskenvaara H, Rantala P., Huskonen U, Kolhinen V.S, Right C., Elomaa T., Petaja T, Naukarinen E, Dalmazo M, Berthier A, Ortega I.K	Reference Scenario and Operational Concept definition for In Space Assembly and Manufacturing Platform Raphael Balsonnade, Nicola Guericio, Mathieu Deremetz	Influence of 3D-Printed Mesh Energy Directors on Heat Generation in Ultrasonic Welding of Carbon Fiber-Reinforced LMPAEK Laminates María Juanatey Muradas, Mohsen Bahrami, Massimiliano Russello	From Waste to Resource: Green Chemical Recycling of Bio Based Epoxy Composites Lorenzo Bonadies, Elisa Calabrese, Pasquale Longo, Annaluisa Maricanda, Liberata Guadagno, Mariaduligia Raimondo	Impact Monitor 2: Specification of preliminary impact-assessment studies of operational R&I Michel van Eenige, Afif Junior	Airfield: Regulation-Aware AI-Assisted FOD Reporting in Airport Operations – A Zagreb Airport Case Study Kouialis I., Militsis N.-M., Toumpas A., Xelfteris V., Šipanović I., Jurčić M., Damjanović M., Quang T., Bushra N., Ioannidis K, Vrochidis S
12:10	12:30	Open Discussion	From Drone to Sports Aerodynamics: A Road to Olympic Medal Ali Arshad, Dinusha Wijesinghe, Toms Kaidalovs	Preliminary Analysis of the Failure of Aircraft with new Propulsion System for the Purpose Maintenance Blessing Ademilwa, Akinola Ayodeji, Kulkarni Manas, Johannes Zehnter, Marc Launer	Open Discussion	ASPERA – Autonomous Spacecraft Pose Estimation with Rendered and Augmented Images: A robust VBN for Autonomous Spacecraft GNC in non-cooperative scenarios N. Andres, H. Fougeroux, B. Martinez Bartrell, R. Moreau, C. Guivet, J. Ramos Montilla	Toward the industrialization of sequential ultrasonic welding for aerospace sector Mohsen Bahrami, Massimiliano Russello, María Juanatey Muradas, Enrico Chemello, Elena Senin Rodriguez	Synthesis and development of inherently highly flame-resistant nylon for aerospace applications Veronica Balzano, Raffaele Longo, Liberato Guadagno, Pasquale Longo, Annaluisa Maricanda	Bridging Research and Education: The Impact Monitor 2 Academy Patrick Ratei	Meteorological Operating Limitations for a Regional Air Mobility Network Tim Schunkerl, Lukas Asmer, Nico Füllthmann, Wolfgang Grimme, Alexandra Leipold, Marc Gelhausen
12:30	13:30	Lunch Break								
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053	05-059	
Session Title	ecoDESIGN and Life Cycle Assessment for Hybrid Electric Aircraft PART II	Innovation in UAVs: Design, Optimization, Flight Testing and Emerging Technologies PART IV	Innovations in Aerospace Propulsion Systems PART II	Digitalization of Manufacturing, sustainable manufacturing, multifunctional structure and MRO PART I	Circular Economy in Space	Data-Driven Engineering Design for Aerospace Manufacturing and Systems PART IV	Innovative Electroactive Morphing for disruptive and sustainable wing design	Hybrid Electric Regional Fuselage & Empennages PART I	Air Traffic Management (ATM) and Airports Subjects PART IV	
Session Chair	Dr. Thomas Reichert & Mr. Peter Brantsch (Fraunhofer-Gesellschaft, Germany)	Prof. Pericles Panagiotou (Aristotle University of Thessaloniki, Greece)	Dr. Christos Mourouzidis (Cranfield University, UK)	Mr. Georgios Bampanis (European Climate, Infrastructure and Environment Executive Agency - CINEA)	Dr. Kai Lindow (Fraunhofer IPK, Germany) & Prof. Miguel Olivares-Mendez (University of Luxembourg, Luxembourg)	Prof. Timoleon Kipouras (Cranfield University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Dr. Marianna Braza (CNRS, France)	Mr. Fabrizio Leone (LEONARDO, Italy)	Prof. Octavian Thor Pieter (University Politehnica of Bucharest, Romania)	
13:30	13:50	Environmental impact assessment of a Fuel Cells Stack in ELECTROPLANE-TEC project Mario Antonio Salazzo, Lidia Travascio, Angela Vozella, Antonio Pagano	Fast Lane Drone Development: How Drone manufacturers can easily test their systems without the need of a specific category approval Jan-Frederick Schön, Paul David Ueten, Nadine Dörge, Yvonne Minnich	Preliminary Sizing, Performance and NOx Reduction Potential of a Hybrid, Hydrogen Gas Turbine Integrated with Solid Oxide Fuel Cells (HyECO Project) Evangelia Panitika, Stefanie de Graaf, Jan Zanger, Daniel Ewald, Panos Laskaridis	Towards LES-Assisted Turbomachinery Design (SCI-FI-TURBO Project) Michael Bergmann, Georgios Goinis, Sulhasan Satcunanathan, Alexander Bleh	Environmental impact of large constellations using the space debris THEMIS Indicator Michaëlles M., Muciaccia A., Lück D., Retagne V., Colombo C.	A Holistic Sustainability Framework for Early-Stage Aircraft Conceptual Design Using Bayesian Networks D. Markatos, T. Kipouras, A. Spinelli, A. Filippatos	Experimental investigation of the aerodynamic performance increase of an A320 morphing wing prototype in subsonic regime Abou Khalil J., Asproullas I., Maynard N., Delon X., El Akoury R., Harran G., Doli C., Rouchon J.F., Braza M.	Innovative Fuselage Structural Concepts for the Integration of Hydrogen Technologies into Regional Aircraft Ana Sánchez Algarra, Deborah Neumann de la Cruz, Maria Rodríguez-Montes	Advanced conflict resolution algorithms and operational scenarios in ASAS simulator Catalin Noe, Ana-Maria Bordei, Mihnea Ditei
13:50	14:10	Environmental impact assessment of the innovative Long-Range Aircraft in EXAELIA project Mario Antonio Salazzo, Lidia Travascio, Angela Vozella	A Multi-Criteria Decision Framework for Operational Benchmarking and Capability Optimization of Unmanned Aerial Systems Stylanos Adamidis, Eleftherios Karatzas, Michail Karalis, Gavril Gavrilidis, Nikos Monokrousos, Kyriakos Grammatikos	Objective-Based Energy Management Strategies for Hybrid Electric Propulsion Systems Evangelia Panitika, Panos Laskaridis, Timas Kipouras	Numerical Modelling of Fluid-Structure Interaction on Wings and Aeronautical Structures in Realistic Conditions (FALCON Project) Denis Ricot, R. Joeger, J. Cheylan, J. Jacob, R. Culdard, Y. Detandt, J.Favier	A Preliminary Requirements-to-Design Framework for Circular Satellite Systems T. Kalampoukas, D. Markatos, A. Filippatos	Adaptive Test Prioritization for Drone Communication Software: A Constrained Bayesian Contextual Bandit Approach Guillaume Clouzeau, Joan Kamurali, Samuele Ramello, Morten Larsen	Aerodynamic performance increase through numerical simulation of a morphing A320 wing prototype in transonic regime Abou Khalil J., Asproullas I., Marouf A., Maynard N., Delon X., El Akoury R., Hoarau Y., Rouchon J.F., Braza M.	Innovative Floor Structure Concepts and Enabling Technologies for the Integration of Hybrid-Electric Regional Aircraft Marc Mineur, Bob Everaert, Tom De Boere, Steven Van Camp, Rashad Fiaz	Simulation-Based Assessment of TBO and xCAS Concepts Sandra Nichilor, Catalin Iordache, Alexandra Dobrescu, Catalin Noe
14:10	14:30	Life Cycle Data Management in Aviation: Attributional and Prospective LCA approaches – Example of an Aircraft Rudder Material and its Associated Data Gaps Peter Brantsch, Aude Marie Bechu, Sven Wüstenhagen, Ralf Schlimper, Alexis Laurent, Carl-Christoph Höhne	Connectivity-Constrained Risk-Aware Planning and Monitoring Framework for BVLOS UAS Operations Stefano Primatesia, Gianluca Scopelliti, Luca Testa	Operability Analysis and Control Structure Characterisation of a Gas Turbine SOFC Hybrid for Hydrogen-Fuelled Commuter Aircraft Muhammad Haad Shaikh, Evangelia Panitika, Argyrios Zolotas, Panagiotis Laskaridis	Overview the EU ROSAS project: Robust simulation Systems exploiting AI based turbulence models and high-fidelity algorithms Vincent Couallier	Toward Circularity in Space: Evaluating and Operationalizing the Circular System Framework for Satellite Reuse Bernd Michael Weiss, Mohamed Elounani, Anna Öhrwall Rönnbäck, René Laufer	Evaluation of Data Driven Architectures for Virtual Thermal Sensing in Brushless Motors Using Fiber Bragg Grating Sensors Brett Schaus, Antonio Costantino Marceddu, Matteo Bertone, Alessandro Aimasso, Bartolomeo Monticuccio, Paolo Maggiore, Matteo Davide Lorenza Dello Vedova	Numerical study of travelling and standing wave morphing on an A320 wing prototype in subsonic regime at Reynolds number of 1 million El Akoury R., Asproullas I., Maynard N., Delon X., Abou Khalil J., Marouf A., Hoarau Y., Rouchon J.F., Braza M.	Topology optimization of aircraft fuselage frame Bartosz Radej, Rafal Żurawski	Air risk assessment for long-range UAS operations under U-space Patrick Le Blaye, Christel Seguin, Tatiana Prosvinnova, Sergio Pizzoli
14:30	14:50	Screening Life Cycle Assessment of Bio-based Composite Access Panel for Trainer Aircraft: Environmental Hotspots and Future Circular Pathways Gyu-Eun Cho, Torsten Müller, Ahmed Mysara, Marvin Veil, Karhan Şahin	AltAfrica for Small UAS Certification: A Model-Based Safety Analysis Approach to AEP-83 Olivier Cornes, Tatiana Prosvinnova, Christel Seguin	The design of a hybrid turbo-electric propulsion with fuel cells for a hybrid regional aircraft with a capacity of 80 passengers and a range of 1,000 km. An assessment of the effectiveness of integrating fuel cell with a hybrid propulsion system Maksym Kirichkov, Yuri Uliutenko, Igor Kravchenko	Digital Twins of Composite Parts: Structure and Data Acquisition along the Life Cycle (TOSCA & COMPASS Project) Christian Eltzinger, Denis Krajnc, Manuel Ederer	Solar-Cycle Effects on Satellite Disposal Compliance in Low Earth Orbit Divya Manivannan	Dynamic Modulation Switching and Real-Time Kalman Filtering for Airborne RSSI-Based Localization in High-Power Rocketry Missions Dimitri Agostino Carrer, Kyriakos Koutsoukis, Antonis Kyvellos, George Chatzopoulos, Anna Christina Markaki, Konstantinos Drakakis, Maria Rouppina	Numerical analysis of embedded actuators effects on an A320 morphing wing prototype for aerodynamic performance enhancement R. Gauthier, Y. Hoarau, A. Marouf, M. Braza, J. Vos	Manufacturing Strategy for an Integrated Composite Fuselage Lateral Panel with one-shot Liquid Resin Infusion Enedir Cereza, Peio Olaskoaga, Maitlen Garaigordobil	Flight Dynamics and Control of a UAS Trajectory on an Aerial Roundabout for Structured Urban Traffic Ana-Maria Bordei, Florentin Şperlea
14:50	15:10	Economic and Environmental Feasibility of Hybrid-Electric Commuter Aircraft Chung-Huan Liu, Florent Lutz	Validation and Deployment Of RF and Remote ID Sensor Systems for Monitoring U-space Traffic Călin Andrei Badea, Dick Bouwhuis	Low-temperature PEM fuel cell air supply system architecture optimization for regional aircraft F. Ascione, J. Biesheuvel, A.J. de Boer	Composing Digital Product Passports to Support Remanufacturing in Aviation (COMPASS Project) Julian de Marchi, Erik Baalbergen, Annemoo de Groen, Anne van Vught	An Optimization Framework for the Conceptual Design of Hybrid Microsatellite Launch Vehicles with Environmental Assessment Girolamo Musso, Iara Figueiras, Alain de Souza, Frederico Afonso, Fernando Lau	Review of Data-Driven Surrogate Models for Structural Analysis of Mounting Systems for Electrified Aero Engines Patrick Y. Schmiede, Lukas Richter, Stefanie de Graaf	Experimental and numerical study of a morphing a high-lift wing-flap configuration through a system of actuators forming a "live-skin" X. Delon, J. Abou Khalil, N. Maynard, A. Marouf, Y. Hoarau, Jean-François Rouchon, M. Braza	Data-Driven Models for Aeronautical Design and Optimization Gonzalo Rubio, Fermín Gutiérrez, Miguel Jardi, Ángel Ladrón, David Ramos, Miguel Sánchez-Domínguez, Nicolás Becerra-Zúñiga, Marta Arnabat-Marin, Andrés Molea-Gabín, Sven A. Lanzan Ferran, Javier Rozalén, Fernando R. Sánchez, Lucas Lacasa, Eusebio Valero	Real-Time Distributed Client-Server Simulation for Trajectory Management of UAS in a Structured Urban Airspace Network Ana-Maria Bordei, Florentin Şperlea
15:10	15:30	Open Discussion	A Microservice Architecture for UAM Fleet Control Stations in U-space Environments Enno Nagel, Sukhbir Singh, Miguel Angel Fds Millan	High-Temperature PEM Fuel Cells for Hydrogen Aviation: Technology Evolution and Integration Perspectives Meriem Fikry, Lily Koops	Circular recycling of thermoplastic composite laminates (CompStar Project) M. Wilms, K. Satish, S. Herksträter, Dr. H. Janssen, Prof. Dr. C. Brecher	Managing Requirements Uncertainty in Early-Phase Spacecraft Design: An Expert-Informed Approach to Design-for-Spacecraft-Reuse Bernd Michael Weiss, Anna Öhrwall Rönnbäck, René Laufer	Data-Driven Calibration of GEKO Turbulence Model Coefficients for Transonic Aerodynamic Flows Nicolò Piersanti, Andrea Ferrero, Viola Rossano, Joel Guerrero	Machine-Learning-based Reduced-Order modelling of a travelling wave morphing system on an A320 wing prototype Maynard N., Marouf A., El Akoury R., Abou Khalil J., Hoarau Y., Rouchon J.F., Braza M.	Open Discussion	Automatic Unmanned VCA Operations in Mixed Airspace Environment: the Case of OPERA Project Boyan Iliev, Marko Radanović

16th EASN International Conference on Innovation in Aviation & Space towards sustainability today and tomorrow										
Preliminary Agenda										
DAY 3 29.10.2026										
8:30 - 18:00	Registration									
ROOM	Lecture Hall I									
9:00 - 9:30	KEYNOTE SPEECH Architecting the Future: ESRE's Vision for Technological Sovereignty in the Next European Space Era by Dr. Catalin Nae ESRE									
Chaired by	TBC Conference co-Chairman									
9:30 - 10:30	DISCUSSION PANEL The long route to gender equality in Aerospace: status, challenges, obstacles, and the way forward Ms. Bárbara Carmelo ISAE-SUPAERO, Dr. Nathalie Duquesne Liebherr-Aerospace Toulouse, Dr. Cornelia Hillenheims DLR, Ms. Martine Sainte-Marie Elles Bougent Association									
Panelists										
Moderated by	Ms. Gioia Venturini SAFRAN Group, France									
10:30 - 11:00	Coffee Break									
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053	05-059	
Session Title	Novel Rejected Heat-to-Thrust Recuperation System for Fuel Cell-Electric Aircraft (exFan Project)	Advances in Hybrid-, Cryo and More Electric Aircraft Technologies for Ultra Efficient Flight PART I	Thermal Management PART I	Gaseous and Liquid Hydrogen storage and refueling for aviation	Energy and Fuels: Radical approaches towards 100% renewable energy and climate neutrality	Digital Engineering for Aerospace Systems PART II	Additive Manufacturing PART I	Transforming CS-23 Aviation: Flying Testbeds, Sustainable Propulsion and Regional Air Mobility Concepts	Towards New Algorithms for Multidisciplinary Design Optimization (MDO) PART I	
Session Chair	Dr. Belén García-Blanco (CIDETEC, Basque Research and Technology Alliance (BRTA), Spain)	Dr. Andreas Battenberg (Fraunhofer, Germany)	Mr. Guillaume Bourelly (Honeywell, Czech Republic)	Mr. Georgios Bampalis (European Climate, Infrastructure and Environment Executive Agency - CINEA)	Dr. Andreas Sizmann (Bauhaus Luftfahrt, Germany)	Dr. Carlos Cabelero de la Hoz & Mr. Francesco Torrigiani (German Aerospace Center (DLR), Germany)	Prof. Teresa Morgado (Polytechnic University of Lisbon, Portugal)	Dr. Sebastian Spitzer (TU Dresden, Germany)	Prof. Joseph Morlier (ISAE-SUPAERO, France) & Prof. Nathalie Bartoli (ONERA, France)	
11:00 - 11:20	Evaporative Cooling with Fogging for Thermal Management of Hydrogen-Electric Aircraft Propulsion Bernhard Gerl, Matthias Ronovsky-Bodisch, Niccolò Ferrari, Martin Berens	Why One Battery is Not Enough: Architecture-Driven Optimization of Propulsion, Non-Propulsion and Reserve Energy Systems in Future Single-Aisle Aircraft Andreas Battenberg, Markus Meindl, Martin Wenger, Florian Hilpert	A Mission-Level Simulation Framework for Integrated Thermal Management of Hybrid-Electric Aircraft Power Systems Tobias Reischl, Corentin Lepais	High-Flow Liquid Hydrogen (LH2) Refueling for Aviation: Preliminary Results and Technical Developments from the GOLIAT Project Jean-Christophe Haguel, Peter Calvert, Lukas Steiger, David Asic	Integration of a multi-stack fuel cell system controller based on an aviation-relevant real-time operation system Milan Lieser, Cornelia Bänisch	Application of Open Digital Platform to the Design and Verification of Enhanced Regional Aircraft Andrea Terracciano, Pierpaolo Bonelli, Cileberti Danilo, Alessandro Elias, Francesco Torrigiani, Gerardo Carbonaro, Vito Primavera, Alfredo Benetti, Fabien Retho, Novella Saccenti	The Impact of Additive Manufacturing in the Aerospace Industry: Challenges and Opportunities Teresa Morgado	Battery System Development to Empower Electrified Aviation Within OSTAVIATION Florian Franke, Alperen O. Altun, Maurice L. Dörnte, André Vetterlein, Stefan Kazula	Reliability-based Overall Aircraft Design using GENSEO Matthias De Iozzo, Nicolas Roussouly, Olivier Sapin	
11:20 - 11:40	Parametric Comparison of Heat Dissipation Architecture for Fuel Cell-Electric Aircraft Matthias Ronovsky-Bodisch, Niccolò Ferrari, Bernhard Gerl, Martin Berens	On the Existence of Long-Range Hydrogen-Powered Transport Aircraft Moschetto JM., Jan R.	System Modelling and Simulation of an Integrated Thrust Recovery System with an Outflow Valve for Next Generation Hybrid Electric Regional Aircraft Sweil Cai, Tazsa Karagözoğlu, Jeong Hoon Heo, Michael Moeller, El Hassan Ridouane	An Assessment of Turnaround Time, Logistic and Safety Distances for LH2 refuelling in Airport (ALRIGHT Project) Francesco Mastropiero, Gianvito Apuleo, Damiano Tormen, Ida Hjerth, Matteo Giampaolo, Alessia Angiolini, Daniele Santini	Jet fuel production via hydrothermal liquefaction of agricultural residues: Economic and environmental performance Leonard Moser, Christina Penke, Valentin Batteiger	Automated Validation and Verification in Aircraft Design: Integrating MBSE and MDO Simone Mancini, Tim Klappath, Jean-Christophe Girel, Sylvain Bêché, Joaquin Garcia Ordóñez, Maria Romero Ruiz, Jasper Bussemaker	Geometry-Driven Hexagonal Extrusion for Enhanced Mechanical Response in PEI-based Material Extrusion Ramazan Yüksel, Mehlika Ahsen Eldemir, Merve Karabal, Alptekin Yildiz	Efficient Preliminary Design and Analytical Pre-Dimensioning of Design-Space-Adapted Hydrogen Pressure Tanks for Future Fuel-Free Aviation at the Example of a Cessna 172N Sebastian Spitzer, Edwin Zimmerman, Alexander Koepf, Chris Fischer, Johannes Markmiller, Malik Gude	Surrogate-accelerated co-design of wing and active flutter controller under CS-25 and uncertainty Carlos Sosa Henriquez, Joseph Morlier, Sigita Klikevičius	
11:40 - 12:00	Integration of Compact Plate-Fin Heat Exchanger in a Ducted Fan Propulsion Systems for Hydrogen-Electric Aircraft Niccolò Ferrari, Matthias Ronovsky-Bodisch, Bernhard Gerl, Martin Berens	Implementation of a higher fidelity electrical propulsive chain in the frame of a hybrid regional aircraft multidisciplinary design analysis Léo Zanard, Didier Broussel-Matheu, Nathalie Bartoli, Emmanuel Bernard, Valérie Penner-Budinger, Sébastien Defoort, Alessandro Speggia	Development and Assessment of Thermal Management System for Hybrid-Electric Propulsion Applications within the ETHAN1 Project Karunakar Reddy Konda, Aiklan Mathiaszhagan, Dishaant Sharma, George LR, Vegini, Majid Asli, Klaus Häscher	Modeling and Optimization of Airport LH2 Dispensing Unit Fleets (GOLIAT Project) Samy Ben-Othman, Christophe Corne, Stéphane Aubert, Germain Hurtado	Sustainable Aviation Fuel from Sunlight and Air: Progress and Perspectives Moritz-Alexander Thiel, Christoph Falter, Max Pargmann, Peter Schwarzbözl, Heider Hussain, Barbara Bohlen, Valentin Batteiger, Andreas Sizmann	Open Digital Environment Integrating Systems into Preliminary Aircraft Mission Simulation and Optimization Reinhold Maier, Klara Ziegler, Robert Marcell, Ögünmur Petersson, Roland Wöchner	Residual stresses evaluation in cold spray process using digital image correlation Abouhamzeh M., Stamatouli K.	Model based approach to optimize air stoichiometry and operating pressure for a PEM fuel cell based propulsion system of a four seater aircraft Mucchi Aleksya, Dieter Peitsch	Preliminary Sizing of Multirotor Platforms for Optimal Mission Planning Giulia Avanzini, Emanuele L. de Angelis, Daniele Fattizzo, Fabrizio Giulietti	
12:00 - 12:20	Fuel Cell Thermal Management – overcoming high heat loads without oversizing heat exchangers Di Christopher Grass, Philipp Jordan, Di Lorenz Braumann, Di Matthias Ronovsky-Bodisch	Design, performance and modelling of an electrical system for a hybrid GT-SOFC propulsion system for commuter aircraft Caohang Liu, Evangelia Pontika, Panagiotis Laskaridis	Influence of Ram Air Channel Cooling Capability and Associated Drag on Fuel Cell Operation and Aircraft Mission Performance Silvan Keim, Raphael Gebhart	LH2 supply-cost uncertainty for H2-powered aviation: European airport case studies (GOLIAT Project) Timo Schelm, Finn Schenke, Astrid Bensmann, Richard Hoke-Rauschenbach	Weight Reduction in Aviation Battery Systems Through Uncertainty-Aware Modeling Within Specified Safety Levels Jenny Marisho, Martin Wenger, Matthias Hessmann, Simon Holt, Javier Marco-Gimeno, Thomas Eberle, Vicent Lorentz	Evaluation of Flight Systems by Interfacing PMI based Co-Simulations with the Aircraft & System Design through SSP R. Zimmermann, A. Schäfer, J. Jepsen, R. Mali	Effect of Printing Parameters on the Electrical Resistance of 3D-Printed Piezoresistive Sensors Based on PEI/CNT/CB Composite Filament Ramazan Yüksel, Mehlika Ahsen Eldemir, Merve Karabal, Alptekin Yildiz	Investigation of CO2-neutral propulsion concepts in the preliminary design for a general aviation aircraft Johanna Haug, Annika Staafs, Andreas Bardenhagen	A Low-Fidelity Model of Fighter Aircraft Operating Costs Erick Espinosa-Judrez, Petter Krus	
12:20 - 12:40	Rethinking Fan Design: The Case for Low-Mach Integration with Heat Exchangers Mavroudis Kavalas, Eleni Pantemarakis, Rainer Schnell	Modelling and Optimization of a UAV Parallel Hybrid-Electric Propulsion System Rita Soares de Pinho, João Fernandes, Vasco Coelho	HyPotrade: Modelling and Simulation of a Two-Phase Mechanically Pumped Loop for Fuel Cell Waste Heat Recovery Sam W. Deckers, Anne K. Ie Nijenhuis, Johannes van Es	Uncertainty-Aware Cryogenic Hydrogen Tank Design Optimization for Regional Turbo-prop Aircraft (DEMOQUAS Project) Georgios S. Arvithis, Konstantinos Bolas, Vasilis G. Gkoutzamanis, Francesco Montomali, Anestis I. Kalfas	Digital Twin-Based Geometric Optimization of Gas Turbine Combustors for Sustainable Aviation Fuels Doğa Kiliç, Melih Yildiz	Virtual and Connected Testing of Hybrid Electric Networks Christian Schyr, Franz Diwoky	Validation of the MUVAX Industrial Concept and FSW Technology Solutions for Fuselage Longitudinal Joints: Results from MRL4 Trials Marco Pacchione	Performance Analysis and Testing of a Fuel Cell for the Electric Propulsion System of a WB-2 "Miss Columbia" Scaled Demonstrator Jose Chamorro, Patrick Schmiede, Lukas Richter, Sebastian Mersbold, Chetan Kumar Sain, Ilija Koch, Stefanie de Graaf, Stefan Kazula	A data model centered MDO discipline integration in GENSEO applied to industrial conceptual aircraft design François Gallard, Fabian Castaneda, Gilberto Ruiz Jimenez, Antoine Dechaume, Julian Bardin, Antoine DeBlais	
12:40 - 13:00	Recirculation-Assisted Surface Engineering of Complex AM Heat Exchangers in Aerospace Applications M.Belen Garcia-Blanco, Virginia Sôez de Viteri, Olalla Ortiz, Amaya Garcia-Casas, Asier Salicio	Operational Readiness Of Short Range Hybrid Electric Aircraft Under Energy, Charging And Thermal Recovery Constraints Divya Manivannan	Development of PHM Concept for HERA Thermal Management System David Fuentes Aguilar, Radek Hecl	An Experimental Two-Dimensional Tank Study of Sloshing Dynamics (HASTA Project) Tiziano Pagliaroli	Investigation report on SAF application strategies of major European aircraft manufacturers Eduardo Tomas Nadal, Javier Cubas, Gustavo Alonso	Model-Based Systems Engineering for Early Zonal Hazard Identification in Aircraft System Design Ayush Kamboj, Yicheng Sun		Sensitivity of a fuel-cell battery hybrid energy system to commuter aircraft mission profile parameters Pascal Albrecht, Lukas Schröder, Dominik Murschenhofer	Hybrid physics-based and operations-aware ML surrogate for spacecraft life support systems Christian Mayer, Leonard Brandstetter, Claas Olthoff	
13:00 - 14:00	Lunch Break									
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053	05-059	
Session Title	Liquid Hydrogen Technologies for Sustainable and Climate-Neutral Aviation (H2ELIOS Project)	Advances in Hybrid-, Cryo and More Electric Aircraft Technologies for Ultra Efficient Flight PART II	Thermal Management PART II	State of the art for H2-air combustion & SOFC-Dynamic panel discussion	Innovative and multi-disciplinary aircraft design for emissions reduction PART I	Digital Engineering for Aerospace Systems PART III	Additive Manufacturing PART II	Impact Assessment in Aviation PART I	Towards New Algorithms for Multidisciplinary Design Optimization (MDO) PART II	
Session Chair	Ms. Emma Celeste Lope Retuerto (Aicituri, Spain)	Mr. Florian Hilpert (Fraunhofer, Germany)	Mr. Guillaume Bourelly (Honeywell, Czech Republic)	Mr. Georgios Bampalis (European Climate, Infrastructure and Environment Executive Agency - CINEA)	Prof. Emmanuel Bernard (ISAE-SUPAERO, France)	Dr. Carlos Cabelero de la Hoz & Mr. Francesco Torrigiani (German Aerospace Center (DLR), Germany)	Prof. Teresa Morgado (Polytechnic University of Lisbon, Portugal)	Dr. Jordi Pons Prats (Polytechnic University of Catalonia, Spain)	Prof. Joseph Morlier (ISAE-SUPAERO, France) & Prof. Nathalie Bartoli (ONERA, France)	
14:00 - 14:20	LH2 Tank Demonstrator Design, Manufacturing and Assembly D. Cimadevilla, D. Arrebol, D. Berends, D. Rodríguez, E. C. Lope, E. Fernández de Bobadilla, J. Ortega, J. Martínez, J. Marlin, J. Morales, M. del Carmen Gutiérrez, V. Simón	Transient operation of a multi-stack fuel cell system for hybrid-electric regional aircraft Cornelia Bänisch, Kai Sommer, Oliver Thälau	Reduced-Pressure Evaporation for Improved Thermal Management Performance of Fuel-Cell-Powered Aircraft Raphael Gebhart, Felix Ladwein, Tim Burschky, Philip Balack	HESTIA: Hydrogen combustion in aeroengines (HESTIA Project) Marc Truccelli	From General Aviation to Regional and SMR, evaluation of novel architectures and technologies for low-carbon air transport using the FAST-OAD aircraft design software S. Defoort, E. Nguyen Van, E. Stragiotti, R. Pareilo, F. Lutz, S. Delbecq, E. Benard	Extending SysML v2-Based MBSE-MDAO Integration to Uncertainty and Multi-Fidelity Optimisation: Application with GENSEO to a Hybrid-Electric Regional Aircraft Jean-Christophe Girel, Jean-Marie Gauthier, Sylvain Bêché, Romain Espoeys, Matthias De Iozzo, Mickael Guillen, Sparsh Garg, Jasper Bussemaker, Francesco Torrigiani, Simone Mancini, Tim Klappath	Roughness-Aware Experimental Validation of an Additively Manufactured Multi-Stage Passive Pressure Reducer for Liquid Hydrogen Propulsion Systems Arash Safaei, Matteo Bertone, Matteo D.L. Dalla Vedova, Paolo Maggiore	Ontology-Based Approach for Future Civil Aviation Technology Management to Combine Literature and Expert Knowledge L. Neubacher, J. Jepsen, P. S. Prakash	MDAO formulations based on disciplinary surrogate models S. Dubreuil, N. Bartoli, T. Lefebvre, C. Gogu	
14:20 - 14:40	Experimental validation of a LH2 Tank Thermo-Fluidic Digital Twin Carles Oller, Marcial Mosqueda-Otero, Eugenio Schillaci, Jesús Castro	Sizing and integration of HT-PEMFC and thermal management systems on a 19-pax aircraft featuring a hydrogen-powered hybrid-electric powertrain Marco Garutti, Simone Sandini, Sergio Machado, Lorenzo Mazzei, Askin Bilkveren	Integrated Modelica Modeling and Simulink Control Development of a Heat Exchanger System for Fuel Cell Propulsion (HEROPS Project) Sweil Cai, Amine Er-Rajji, Grzegorz Kruczek, Changmin Cao, Vassilis Tsachouridis, El Hassan Ridouane	Integrated power and propulsion system based on hydrogen gas turbine and SOFC for clean aviation (HyECO Project) Stefanie de Graaf, Panagiotis Laskaridis, Mauro Salazar, Mario L. Ferrari, Jan Zanger, Frederic Tong-Yette	Multifidelity overall aircraft design of a LH2-Powered Strut-Braced Dry-Wing Aircraft using surrogate models and design of experiments R. Pareilo, E. Stragiotti, S. Defoort, E. Nguyen Van, C. Julien, L. Verlonghen, C. Mollet, M. Méheut, D. Losada Costoso, F. Moens, O. Alinaout, G. Starck	A Modular Digital Engineering Framework for Multidisciplinary Sizing and Integration of Hydrogen-Electric Aircraft Propulsion Systems Pablo Moreno-Escobádo, Marco Raiola, Rodrigo Castellanos, Andrea Cini	Study of the recycling impact on fatigue behaviour of a Ti-6Al-4V produced by SLM Teresa Morgado, João Alves, Daniela Neves	System of Systems Approach to Impact Assessment in Aviation Using a Multilevel Sustainability and Competitiveness Framework Patrick Rater, Prayal Shiva Prakash	Acceleration of the Bi-Level BCD MDO Architecture Applied to Aircraft Design Shubham Deshmukh, François Gallard, Joel Brazillon, Anne Gatazyk, Andrea Bugnoli, Joseph Morlier	
14:40 - 15:00	An Attempt at Validation of Means of Compliance (MoC) for the Permeability of LH2 Tank Wall Materials A. B. Horvat, G. Dreossi	Optimization Potential of Altitude-Adaptive Control Strategies for PEMFC Systems Jonas Seifelle, Dominik Murschenhofer	Test results of a 150kW Direct Water Evaporation Demonstrator for Improved Fuel Cell Thermal Management in Aerospace Applications Tim van de Weijer, Johannes van Es, Raphael Gebhart	Demonstration of Novel Kerosene-H2 Multi-Fuel Combustor (HOPE Project) Kaushal Dave, Alam Garciduenas-Correa, Lorenzo Palanti, Lorenzo Mazzei, Cosmo Bianchini, Arvind Gangoli Rao, Francesca De Domenico	LH2-Powered Strut-Braced Dry-Wing Aircraft: Aero-Structural Benefits and Challenges M. Méheut, D. Losada Costoso, F. Moens, O. Alinaout, G. Starck, C. Julien, L. Verlonghen, C. Mollet, S. Defoort, E. Nguyen Van, E. Stragiotti, R. Pareilo, J. Sodja, S. de Boer	Exploration of Machine Learning-Assisted Multidisciplinary Design Optimization Methods in Aircraft Conceptual Design Using Digital Twin Technology Elif Zeynep Tekin, Melih Yildiz	Experimental and Numerical Investigation of the Dynamic Properties of Sandwich Structures with Lattice Cores Florian Mock, Kai-Uwe Schröder	An Integrated Modeling and Dashboard Framework for Aviation Impact and Transformation Assessment P. Bertram, P. Rater, J. Jepsen, P. S. Prakash	Topology optimization of composite structures using curved Double-Double laminates Thuan Ho-Nguyen-Tan, Hoi Choi, Minkook Kim, Soon Ho Yoon, Jaesang Yu	
15:00 - 15:20	The Representativeness of Helium for LH2 Tank Permeability Testing: A Comparative Study G. Dreossi, A. B. Horvat	Scalable Integrated Power Electronics for Fuel Cell Regional Aircraft Markus Meindl, Florian Hilpert, Bernd Eckardt	Impact of Puller Fan Integration on the Design and Off-Design Performance of a Hybrid-electric Fuel Cell Aircraft Thermal Management System (TheMa4HERA Project) Angel Garmilla Manzano, Philip Balack, Raphael Gebhart		Preliminary design of a future SMR aircraft powered by LH2 Open Fan engine E. Nguyen Van, V. Brodebeck, S. Defoort, N. Tantar	Sequential Sampling Algorithm for the Design of a Hybrid-Electric Regional Aircraft under Uncertainty Romain Espoeys, Matthias De Iozzo, Jean-Christophe Girel, Sylvain Bêché	Study of additive manufacturing of advanced ceramics with acoustic waves Cloté Benoit, Marc Mihajlovic, Antoine Dode, Marine Bertucchi, Gabriele Racz, Christophe Tenailleau, Cédric Neuville	System Dynamics and Game-Theory Modelling for Multi-Stakeholder Competitive Analysis in System of Systems Aviation Impact Assessments H. Szöke-Erös, P. S. Prakash	High-Order Beam Modelling of Tapered Composite Wing Structures Cardone D., Cavallaro R., Ciri A.	
15:20 - 15:40	Assessment of Structural and Leakage Behavior of Gasketed Bolted Flange Joints for Cryogenic Applications George Tzoumakis, Stavros Vallis, George Lampeas, Spiros Pantelakis	Enhancing Reliability of Electric Aircraft Power Systems: A Study on Silicon Carbide and Gallium Nitride Power Devices Under Radiation Exposure Arjit Sengupta, Kurt Gnerlich, Ilija Koch, Stefan Kazula	Loss Mechanisms and Efficiency Limits in Fuel Cell Ram Air Cooling Channels: Diffusers, Heat Exchangers, and the Meredith Effect Raphael Gebhart, Silvan Keim, Julius Wildeboer, Andreas Lesser	Open Discussion	Nonlinear Aeroelastic Wingbox Sizing Model for Overall Aircraft Design of Flexible High-Speed-Ratio Wings Ousmane S., Joseph Morlier, Emmanuel Bernard	Towards a Scalable Reference Architecture: Matrix-based Approach to Scalable High-Level Requirements for Next-Generation Military Integrated Modular Avionics (NG MMA) Philipp Hahner	Tensile Characterization of Light-Weight PLA and ASA Thermoplastics for Fused Filament Fabrication Alexander J. Lamey, Ruben E. Perez	A Novel Taxonomy for Aviation Emissions Models Michael P. Wehnold, Marty Noe, Gian Carlo Heller, Peter Wild, Russell McKenna	A Multi-Objective Optimization Framework for Sustainable and Strategic Airframe Material Composition in Conceptual Aircraft Design Shantanu Sapre, Joseph Morlier, Christian Gogu, Olivier Grellou	
15:40 - 16:00	Development of a Comprehensive Testing Infrastructure for Cryogenic Liquid Hydrogen Technologies in Aviation: Safety, Loading, and Performance Validation Vivancos G, Carpio A, Mundo I, Fernandez S, Vilar J, Nêlio M, Parera M	Heat exchanger for the hydrogen engine fuel system Ilija Petukhov, Taras Mykhailenko, Oleksii Lysytsia, Artem Kovalov	Rear-Fuselage Integrated Surface Heat Exchanger for Fuel Cell Cooling in Regional Aircraft Tom-Søren Stump, Ulrich Carsten Johannes Rischmüller, Arturo Carboné Mejías, Mirko Hornung		Flight Mechanics-Driven Conceptual Design of Twin-Fuselage Aircraft Álvaro Cobo-González, Miguel Antonio Antón-Díez, Miguel Ángel Gómez-Tierno, Manuel Pérez-Cortés, Cristina Cuervo-Rejado	Natural Language Processing for Pilot Intent Recognition in Next-Generation Fighter Cockpits: a Proof-of-Concept and its Assessment Approach Mario Muscio, Marco Fabbri	Structural Integrity of Solid-State Metal Additive Manufacturing for Aerospace Components Diana Lados, Anthony Spangenberg		Machine-Learning-Assisted Transfer Matrix Analysis of Cutout-Induced Imperfections in Rotationally Symmetric Shell Structures Finn Eggers, Kai-Uwe Schröder	

16th EASN International Conference on
Innovation in Aviation & Space towards sustainability today and tomorrow

Preliminary Agenda								
DAY 4 30.10.2026								
8:30 - 12:00	Registration							
ROOM	Lecture Hall 1							
9:30 - 10:00	KEYNOTE SPEECH Technical Considerations for Propulsion Systems of Future European Launchers by Prof. Francesco Nasuti University of Rome & Air and Space Academy							
Chaired by	TBC Conference co-Chairman							
10:00 - 10:30	Coffee Break							
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-053
Session Title	Understanding hydrogen-air combustion in aeroengines (HESTIA Final Event)	Next Generation Efficient Airframe Production: Materials, Automation and Lightweight Design	Thermal Management PART IV	Navigation and Control Onboard Systems	Innovative and multi-disciplinary aircraft design for emissions reduction PART III	Aircraft Operability: from design to operational performance PART I	Aerodynamic/ Aeroelastic Analysis PART I	The Race to 2035: Hybrid-Electric & SAF for Regional Routes vs Direct Hydrogen Combustion for Medium-Haul Missions: Which of these two pathways is expected to achieve certification first by 2035, and why?
Session Chair	Mr. Marc Truscelli (SAFRAN Group, France)	Dr. Andreas Battenberg (Fraunhofer, Germany)	Prof. Michael Weigand (TU Wien, Austria)	Prof. Cezary Szczepanski (Warsaw Institute of Aviation, Poland)	Prof. Emmanuel Benard (ISAE-SUPAERO, France)	Prof. Joël Jézégou (ISAE-SUPAERO, France)	TBC	Mr. Emmanuel Isambert (EASA - European Union Aviation Safety Agency)
10:30 - 10:50	HESTIA: Hydrogen combustion in aeroengines Nicholas Treleaven, Marc Truscelli	Beyond the Test Pyramid: A New Approach for Certification of Emerging Materials and Structures John-Alan Pascoe	Development and testing of a lightweight two-phase pumped cooling system for aviation fuel cells in the BRAVA project Henk Jan van Gerner, Georg Mühlthaler, Marcus-Benedict Buntz	Comparison of Classical and Neural Network-Based Approaches for UAV Trajectory Prediction Welcer M., Ładyżyńska-Kozdraś E., Sahbon N., Zajdel A., Szczepański C.	Laminar-Turbulent-Supercritical-Wing Concept and Its Aerodynamic Properties in Transonic Flight Stolewski W.	Designing for Operations: Translating Customer Expectations into Aircraft Availability Sebastien Dargein	Aerodynamic Characterization of HYPERION Suborbital Spaceplane Roncioni P., Marini M., Palazzo S., Izzo C., Schettino A., Di Benedetto S., Russo G., de Pasquale L., Volo C., Stoican MG, Bunescu I	
10:50 - 11:10	Mastering key phenomena of H2/air combustion Benoit Fiorina	Surface-Integrated CNT-Based Piezoresistive Strain Sensors on CFRP Composites for Structural Health Monitoring Yusuf Can Sudutemiz, Melissa Dincer, Dilan Arslan-Catalak, Hulya Cebeci	Cryogenic thermal conductivity of additively manufactured ceramics for thermal management components Nils Wieja, Lisa Mikiss, Jan Condé-Wolter, Christoph Ebert, Martin Schwentenwein, Maik Gude	Software-in-the-Loop Validation of Active Disturbance Rejection Control for Autonomous Taxiing of Unmanned Aircraft Albert Zajdel	Airfoil Optimization for conceptual design of novel aircraft concepts L. Neuerburg, S. Cremer, F. Schülke, E. Stumpf	Selection of Right Maintenance Strategy in Early Aircraft Design based upon a Model-based Methodology Veda Sai Vasanth Naidu Adduru, Kritthi Ganesh Kottary, Joël Jezegou, Sagar Shenoy Manikar	Analysis of Critical Stores in an Internal Weapons Bay Using Detached Eddy Simulations John G MacLaurin, Ruben E Perez	
11:10 - 11:30	Injection systems design – incremental & breakthrough technologies Thomas Komarek	Structural Mass Optimization of Boeing 787 Components Using CFRP-Kevlar Hybrid Composites for Fuel and Emissions Reduction Mykyta Koliesnik	Demonstration and Performance Assessment of Two-Phase Cooling for Fuel Cell Stacks in Commercial Aviation Marcus-Benedict Buntz, Henk Jan van Gerner, Georg Mühlthaler	Methods of improving inertial navigation based on terrain-referenced measurements Krzysztof Borodacz	An Ice-Tolerant Tailplane Sizing Methodology for High-Aspect-Ratio Truss-Braced Wings Ciro Cuozzo, Salvatore Corcione, Alessandro Zanon, Lucas Kugler	Model-Based Operational Effects Analysis Erna Almeida, Pedro Martins Gonçalves	Experimental Research of Cantilever Wing Flutter and Its Suppression Algorithm at Low Reynolds Numbers Based on Unsteady VLM Modeling Marilynas Lendraitis, Jonathan Gerald Pelham, Mindaugas Dagilis, Sigita Klikevičius	
11:30 - 11:50	H2 combustion technology specifications and operability assessments in representative aircraft conditions Murthy Ravikanth	Multiscale Modelling and Machine Learning of Shock-Absorbing Hyper-Elastic Metamaterials for Aerospace Payload Protection Yago D., Abad D., Cante J., Uoberas-Valls O.	Flight and Wind Tunnel Performance Characterization of a Structural Folded-Core Composite Skin Heat Exchanger Using Temperature-Sensitive Paints Marvin Tigre Lorschow, Simon Thissen, Stefan Zisler, Andreas Bender, Jakob Gugliuzza, Rico Poser	Motor control Electronics for Flight Control Actuators, A Trade Study of Architecture and System-Level Packaging Nejat Mahdavi, Julian Ziegler, Sven Regenscheit	The roadmap for sustainable reduction: main objectives, solutions and key considerations Maria Zamareño Suárez, Rosa María Arnaldo Valdés, Francisco Pérez Moreno, César Gómez Arnaldo, Raquel Delgado Aguilera, Jurado and Víctor Fernando Gómez Comendador	Computational Fluid Dynamics Investigation of Multi-Element Tubercle Wing Design Martin M. Alexiev, Ruben E. Perez	Prediction of jet noise for a shielding configuration of a supersonic aircraft nozzle using a RANS-based acoustic analogy Anilmo Glorioso, Mattia Barbarina, Francesco Petrosino and Giovanni Fasulo	
11:50 - 12:10	Open Discussion	Surrogate-Assisted Layout and Sizing Optimization of a Composite Wingbox Using Automated GFEM Generation Nikolaos Ziakos, Andrea Cini	Computational Investigation of Oil Flow Characteristics for Lubrication and Cooling Optimization in a new complex aircraft transmission Helmut Mad, Gernot Burghard Hedjri-Peyfuss	Improved Aircraft Protection on Ground Through Heterogeneous Sensor Fusion: an Experimental Assessment Angelo Manco, Federica Vitello, Maria Carmela Mas Marhuenda, Giancarlo Gelao, Gabriella Gigante, Piero Migliorato, Angela Vozella, Paolo Veneruso, Enrico Niccio, Flavia Causa, Roberto Oromolla, Giancamille Fasano, Pablo Manuel Guzmán Manzanares, Francisco Javier Garrido Hernández, Francisco Javier Pérez Grau, Giovanni Franzini	Semi-empirical liner design procedure for aeronautical engine noise reduction F. Petrosino, F. Pesce, M. Barbarino, G. Fasulo, R. De Robbio	Investigation and Formalisation of the Relationship between Sustainability and Operability Pratik Anand Badawadagi, Vinath Kumar Aroumougame, Joël Jezegou, Sagar Shenoy Manikar	Evaluating metamaterials for aeroelastic instability mitigation in wind energy Sergio G. Harcas, David Roca, Enrique Ortega, Juan Cante	HERA Project Piscopo Giuseppe
12:10 - 12:30		The Application of Physics-Informed Neural Networks for Structural Strength Enhancement J. Ribeiro, B Ribeiro, R. Filas, S.M.O. Tavares	CFD-Analysis of an integrated Turbofan Guide Vane Heat Exchanger for Hydrogen and Conventional Propulsion systems Gernot Burghard Hedjri-Peyfuss, Patrick Loggner, Helmut Mad	Modelling Data Busses Matte Rahm, Jonte Kaleska	Computational framework for aircraft noise estimation, from source to the ground F. Petrosino, L. De Vivo, M. Barbarino, G. Fasulo	How can AI assist in Live Decision Making for Aircraft Fleet Performance in Airlines Maintenance Control Centers? Vincent Cheriére, Nicolas Andre, Siwar Lachiheb	Flutter Analysis of Flexible Wing Configurations Using Pre-Stressed Structures Technique M. Bocioaga, R.A. Bocioaga, T. Viadmirescu	

12:30		13:30		Lunch Break													
Room		Lecture Hall 1		Lecture Hall 2		Lecture Hall 3		05-108		05-112		05-114		05-117			
Session Title		Maintenance, Repair & Overhaul (MRO)		Testing & Simulation based analysis of aircraft structures		Thermal Management PART V		Aviation in Transition: Bridging Engineering, Operations and Policy		Innovative and multi-disciplinary aircraft design for emissions reduction PART IV		Aircraft Operability: from design to operational performance PART II		Aerodynamic/ Aeroelastic Analysis PART II			
		Session Chair		TBC		TBC		Prof. Michael Weigand (TU Wien, Austria)		Mr. Laurent Joly (ISAE-SUPAERO, France)		Prof. Andreas Strohmayr (University of Stuttgart, Germany)		Prof. Joël Jézégou (ISAE-SUPAERO, France)		TBC	
13:30		13:50		Quality Assessment of Adhesive Joints Using Feature-Based Machine Learning Elena Jasūnienė		A Computational Framework for Predicting the Mechanical Properties of Recycled CFRP Laminates Ilektra Tourkantoní, Konstantinos Tsirpes		Modeling of Coupled Bearing Chamber and Scavenge Line Processes in a Gas Turbine Engine Taras Mykhailenko, Iliia Petukhov, Artem Kovalov, Oleksandr Gorisko, Oleksii Lysytsia		GHIST: A Geospatial Decision-Support Framework for Hydrogen Aircraft Integration into European Flight Networks Ayodeji C. Akinola, Thomas Feuerle, Peter Hecker, Marc Launer		Uncertainty-aware global sensitivity analysis for aircraft conceptual design Alessandro Borgia, Francesco Orefice, Arvind Gangoli Rao		Strategies for Technology Infrastructures in Aviation Degenhardt R., Mialon B., Ceglia G., Kühnelt H., R. Moreno, F. Cardoso, Hakkaart J., Land P., Coutosayalera V., Drężek P., Zalewska M.		Development and Numerical Investigation of Dimple Surfaces for Flow Loss Reduction on Gear Side Faces Gernot Burghard Hedjri-Peyruss, Helmut Mad	
13:50		14:10		Embedded FBG-Based Smart Composite Panels for Aerospace Structural Health Monitoring and Impact Detection Alessandro Aimosso, Paolo Maggiore, Matteo D.L Dalla Vedova		Simulation of aircraft kinematics during ditching using a meshfree pointset method D. Kohlgrüber, M. Pelsch		Aerodynamic Design and Evaluation of Open and Shrouded Propellers for eVTOL Applications Julia Sembowski, Daniel Kessler, Jonas Oldeweme, Radimir Yanev, Ingo Staack, Jens Friedrichs		Tailoring Aviation Decarbonisation Roadmaps: Advancing AeroMAPS Towards Highly Customisable Scenario Modelling Antoine Salgas, Thomas Planes, Scott Delbecq		Multidisciplinary Design Optimization of Hybrid Aircraft: Influence of the Range of Mission Profiles on Optimal Design Didier Brousset-Matheu, Eric Nguyen Van, Sébastien Defoort, Xavier Roboam, Bruno Soreni		Regional Operative Scenarios for Hybrid-Electric Regional Aircraft Prashant Prashant, Pieter-Jan Proemans, Maurice Hoogreel, Fabien Retho, Philippe Baraboin, Rui Marcelino, Catarina Ferreira, Fabio Martins		Flight Dynamics Assessment of a Twin-Fuselage Aircraft Using a Conceptual-Level Aerodynamics Model Álvaro Cobo-González, Eduardo García-Santana, Cristina Cuerno-Rejado	
14:10		14:30		Monitoring and Mitigation of Ice Formation in Aircraft Structures and Fuel Systems Helge Pfeiffer, Navid Mostofi Sarkari, David Severno		Aero-Structural Modelling of a Two-Degree-of-Freedom Movable Wingtip for Aeroelastic Response Analysis Peide Zhou, Bocheng Zhang, Chao Yang		Comparison of numerical and experimental investigations of an air cooling duct under propeller slipstream, crosswind, and headwind effects Prabhat Singh, Dirk Soggeberg, Sebastian Merbold, Stefanie de Graaf		Fleet-Level Assessment of Multi-Fuel Aircraft in the European Flight Network Adnan Muslić, Barlas Türkyılmaz, Moritz G. Kolb, Ling L. Lim		Quantifying Sensitivities and Efficiency Penalties of Conventional TLARs on Fuel-Cell-Electric Regional Architectures Simon Müller, Georgi Atanasov, Thomas Zill		Reliability-Based Maintenance Cost Estimation for Alternative-Propulsion Aircraft Ayodeji C. Akinola, Blessing Adetomiwa, Kulkarni Manas, Marc Launer		Methodology for immersive AR/VR visualization of CFD simulations Sergio Avila-Sanchez, Alvaro Cuerva-Tejero, Oscar Lopez-Garcia, Ricardo Fernandez-Aldama, Guillermo Torres-Pedrares	
14:30		14:50		Opportunities and challenges of resonant ice protection systems for regional aviation Valérie Pernier-Budinger, Marc Budinger, Pierre Bonhomme, Yohan Sabathe, Jason Pothin, Valerian Palanque		Progressive Damage Analysis of Stiffness-Transition Regions in Composite Aerostructures Under Static and Impact Loading Hande Girard, Yusuf Ozan Çakir, Dilan Ezgi Yücel		Water droplet spray injection for optimization of RAM air heat exchangers in next-generation aircraft: proof of concept, test set-up and results Monique Lamers, Thomas Ganzeboom, Johannes van Es		A Roadmap for the Reliable Adoption of Wide Bandgap Power Electronics in Electric Aircraft Propulsion Arijit Sengupta, Jeff Kugener, Kurt Gnerlich, Jose Chamorro Cuastuza, Ilja Koch, Stefan Kazula		A Mid-Fidelity Aeroacoustic Assessment of the Hydrogen-Fuel-Cell Propulsion System Ground Demonstrator of the NEWBORN Project M. Barbarino, A. Visigardi, F. Petrosino, G. Fusolo, F. Morando, E. G. Behar		Reducing fuel flow and CO2 emissions during cruise flight through continuously increasing altitude operations on the North Atlantic Track System Marco-Michael Temme, Metodi Meissner		Enhanced UHBR Reynolds-Number Scaling for Flying Testbed Design Marco Trost, Rainer Schnell	
14:50		15:10		Noise Reduction of Laser-Ultrasonic Signals in CFRP Using a Hybrid Deep Learning Approach Adil Mhate, Caspar Wasle, Rebecca Rodeck, Gerko Wende		Efficient computation of the dynamic response for vibroacoustic metamaterials on finite stiffened plates Daniel Albold, Marcel Mechnarowski, Lukas Kettenhollen, Kai-Uwe Schröder		Gradient-Based Aerodynamic Optimization and Experimental Validation of a Wing-Integrated Heat Exchanger for Fuel Cell Aircraft F. Sell, J. Seel, D. Nölle, J. Markmiller, H. Pfeifer		Operational Efficiency through Aircraft Sharing: A Tactical Planning Perspective Vasiliki Kalliga, Thomas Hagspiel, Constantinos Antoniou		Assessing Noise-Related Environmental Interdependencies of EFAC Aircraft Technologies across Vehicle, Airport and Fleet Levels Oleksandr Zaporozhets, Vitalii Makarenko, Kateryna Kazhan, Vadim Tokarev, Andrzej Chyla		Using Continuous-Time Markov Chains for Model-Based Safety Analysis Olivier Sapin, Matthias De Lozzo, Tony Ghueldre, Tatiana Prosvinnova, Christel Seguin		Aerodynamic Considerations for Autonomous Urban UAV Systems: Investigating Compact EDF Architectures for Close-Proximity Flight Operations E. Mikayelyan	
15:10		15:30		AJP-Based Strain Sensing for CFRP Structures: From Anisogrid Validation to Tank-Level Application Stefano Perilli, Francesco Galliani, Emanuele Mantini, Massimo Di Pietro, Francesca Di Caprio, Vincenzo Iannone, Giovanguiseppe Giusto, Michela Simoncini, Massimo Panella, Eva Milella		Thermal-Function-Driven Design and Integrity Assessment of Multifunctional Multilayered Sandwich Structures for Aircraft Skin Panels Xiaohui Chen, Kai-Uwe Schröder		Thermal Management in Emerging Propulsion Architectures: Opportunities and Design Challenges Carlos Xisto, Anders Lundblad		Business Impact Assessment of Environmental Decision-Support Tools for Aviation and Innovative Air Mobility Anna Palaiologou, Sofia Iosifidou, Eleftheria Georgant, Eva Palaiolog		Fleet-Level Effectiveness and Fuel Penalty of Vertical Control Avoidance for Long-Range Aircraft in Conceptual Design Shao-Yu Wang, Elif Erden, Simon Kirschler, Dennis Piontek		Management of Command-and-Control Link Loss for Automated VCA Flight in Uncontrolled Airspace Boyana Iliev, Roberto Trapananti, Marko Radanovic		Main rotor aerodynamic design for Marlian manned rotorcraft capable to transport passenger or load for future mars missions Kocjan J., Rogólski R., Kiszowski Ł., Kachel S.	
15:30		15:50		Automated Digitization of Maintenance Handwritten Data Using Multiple Fine-Tuned Models Alejandro Murrieta-Mendoza, Toan Vos, Leandro Rodrigues Oliveira Yair Brouwer													
Room		Lecture Hall 1															
16:00		16:30		Concluding Remarks, Best Poster Award Announcement & Conference Closing													
End of the 15th EASN International Conference																	

16th EASN International Conference on
Innovation in Aviation & Space towards sustainability today and tomorrow

Preliminary Agenda

Poster Session							
Poster Tours: October 27th (Day 1), 16:30-17:30 & October 29th (Day 3), 16:00-17:00							
Poster ID 40	Poster ID 41	Poster ID 47	Poster ID 58	Poster ID 73	Poster ID 82	Poster ID 89	Poster ID 126
Multi-Fidelity Design and Aero-Thermal Integration of a High-Performance Heat Exchanger for Fuel Cell Aircraft <i>Herai Douza, Saheed Ojo, Grzegorz Kuczek, Changmin Cao, El Hassan Ridouane</i>	A Multimodal Graph Framework for Air-Rail Connectivity Analysis and Disruption Simulation <i>Elahi Concha, Paul Hernandez, Petar Mrazović, Ismini Stroumpou, Josep Luis Larriba Pey</i>	Synergistic Design of a Shul-Braced Wing Aircraft with Natural Laminar Flow for Energy-Optimal Long-Range Operations <i>Felix Brenner, Ellen Künstler, Andreas Strohmayr</i>	Control of a Friction Welding Device mountable on CNC Lathes <i>Sarantis Nikolettakis, George-Christopher Vasiakos, Evangelos Tsimas</i>	Environmental Durability of Fiber-Reinforced Polymer Composites for UAV Structures under Thermal, Humidity, and Salt-Spray Exposure: An Integrated Computational-Experimental Framework <i>Hande Girard, Süde Kantoğlu, Abdullah Duman and Elif Ördü</i>	Dynamic Simulation of Spill-Wheel Cold Air Unit for Aircraft Thermal Management <i>Chandra Shekhar Sharma, Chennu Ranganayakulu</i>	LWC sensor for UAVs designed for operating in icing conditions <i>Damian Liszewski, Jakub Baryka</i>	Simulation-Based Design of a Fuel Cell Electric Powertrain for a 10-Passenger Aircraft <i>Marlin Aggarwal, Rafael Pinkser, Patrick Perli, Alexander Trattner</i>
Poster ID 143	Poster ID 154	Poster ID 162	Poster ID 182	Poster ID 201	Poster ID 216	Poster ID 241	Poster ID 257
A Dual-Model Machine Learning and Sparksee Knowledge Graph Framework for Flight Disruption Prediction and Cascade Analysis <i>Hao Chen, Zhiqian Zhou, Elahi Concha, Paul Hernandez, Josep Luis Larriba-Pey</i>	Liquid Hydrogen Supply for the BAUS Test Environment <i>Felix Rebel, Jörg Weiss, Cornelia Börsch</i>	Flying Under Different Rules: Low-Cost Carrier Responses to National Aviation Tax Regimes in Europe <i>Michał J. Wichrowski, Viktor Trasberg</i>	Enhancing Reliability Analysis to Improve Maintenance Decisions <i>Alejandro Murrieta-Mendoza, Sietse Dijkstra, Daniel Friesen, Konstantinos Stamoulis</i>	Variable Rotor Speed Transmission Architecture for Energy-Efficient Operation Across Multiple Flight Conditions: High-Speed Vertical Lift Aircraft <i>Helmut Mad, Jonas Koch</i>	From Airspace Efficiency to Acceptance: Towards a Social Impact KPA for U-space <i>Anthoula Giannivassili, Anna Palaiologk, Elitheria Georgantl, Kyriaki Daskaloudi, Eva Palaiologk</i>	A Multi-Stage Gearbox for Plug-In Hybrid Aircraft Propulsion with Unrestricted Turbine Airflow <i>Patrick Laggner, Gernot Burghard Hedjri-Peyfuss, Helmut Mad</i>	A Methodical Simulation of Cost-Constrained Decarbonization Pathways for the Air Transport System <i>Zirui Zhu, Nicolas Petelth, Paul Roche†</i>
Poster ID 271	Poster ID 313	Poster ID 335	Poster ID 337	Poster ID 360	Poster ID 390	Poster ID 392	Poster ID 396
Optimized Cockpit structure manufactured via explosive forming <i>J. Seguy, C. Guichereau, D. Chartier</i>	A Cross-Domain Approach to Space System Requirements Engineering: Integrating ECSS with Selected ARP4754 Practices <i>Ewelina Szpakowska-Peas, Michał Piwowarczyk, Bartosz Kościanek</i>	Evaluation of bending ductility and fracture surface analysis in two additively manufactured complex cellular structures made of aluminum alloy <i>Monkova K.</i>	Experimental Analysis of GH2 Dispersion in Aircraft Cabin <i>Jonas Meinel, Arne Wendt, Thorsten Schüppstuhl</i>	AI Use Case Profiling, Clustering, and System Decomposition for Compliance-Oriented ATM Applications <i>Ismini Stroumpou, Josep Luis Larriba-Pey</i>	Pycnometer-Based Assessment of 3D Volumetric Measurements System for Nanosatellite Debris Characterization <i>Marlin Spel, Christine Espinosa, Remy Chieragatti, Djamel Bennai</i>	High Fidelity Simulations of Hypervelocity Impact Fragmentation: Implications for Space Debris Breakup Models <i>N.S.S.P Kalyan, Guillaume Anciaux, Jean François Molinari</i>	Adaptive RAAN Based Optimization of Regional CubeSat Constellations Using a Time Regularized Revisit Metric <i>Ebu Bekir Ciftci, Halil Ersin Soken</i>
Poster ID 415	Poster ID 426	Poster ID 428	Poster ID 433	Poster ID 434	Poster ID 439	Poster ID 452	Poster ID 455
Thermo-Structural Modeling of LH2 Tanks for Aircraft Design <i>Vishwanath Nagaraj, Francesco Orefice, Roelaf Vos</i>	Bio-Inspired Wing Optimisation for Efficiency and Lateral-Directional Stability of a Vertical-Tailless Heavy Autonomous Glider <i>Francesca Barone, Erwin R. Gowree, Paraskevas Kalandronis, Maëlle Le Ménès Rego, Pedro D. Macedo Afonso, Tancredi M. Siragusa, Riki Toubkin</i>	Bio-morphing Deployable Tail Plane Options for Longitudinal, Lateral and Directional Control of Compact Stowage Autonomous Heavy Glider <i>Francesca Barone, Erwin R. Gowree, Paraskevas Kalandronis, Maëlle Le Ménès Rego, Pedro D. Macedo Afonso, Tancredi M. Siragusa, Riki Toubkin</i>	Biology-inspired Active Morphing for Vertical Deceleration <i>Francesca Barone, Erwin R. Gowree, Paraskevas Kalandronis, Maëlle Le Ménès Rego, Pedro D. Macedo Afonso, Tancredi M. Siragusa, Riki Toubkin</i>	Nature-Inspired Long-Range Expendable Supply Glider: Seagull Wing Aerodynamics and Flying Squirrel Landing Concept <i>Francesca Barone, Erwin R. Gowree, Paraskevas Kalandronis, Maëlle Le Ménès-Rego, Pedro D. Macedo Afonso, Tancredi M. Siragusa, Riki Toubkin</i>	Assessment of Structural Requirements for Building a Lunar Habitat <i>Ankitha Kamath, Basim Uwels, Univ.-Prof. Dr.-Ing. Kai-Uwe Schröder, Dr. Prashant GK</i>	Ice detection and automatic activation of a resonant electro-mechanical de-icing system using piezoelectric impedance and machine learning <i>Rémi Myard, Marc Budinger, Valerie Pommier-Budinger, Aurelien Reyssat</i>	Multidisciplinary Integration of High-Fidelity Models in the Preliminary Design of a Box-Wing DEP Aircraft <i>Sara Hijazi, Andreas Strohmayr</i>
Poster ID 466	Poster ID 481	Poster ID 486	Poster ID 488	Poster ID 490	Poster ID 496	Poster ID 498	Poster ID 499
Aerothermodynamic Shape and Material Assessment for Environmentally Sustainable CubeSat Re-entry <i>Ankitha Kamath, Gayathri B. Preetha</i>	POE-Encapsulated IBC Solar Cells on Pre-Cured CFRP: Adapting Lightweight PV Laminates Manufacturing for Stratospheric HALE UAV Applications <i>Christian Hammerly</i>	The Harvard-Autonomous Architecture: Decoupling Safety from Intelligence in AI-driven Flight <i>Miguel Marín Acosta, Luis Santiago Garrido Bullón</i>	From Green Deal to Green Hydrogen: Mapping Energy Transition Research in European Union Countries <i>Esma Ulusan, Melih Yıldız</i>	Novel Hybrid Approach of Metal Leading Edge Manufacturing Combining Forging and Laser Powder Directed Energy Deposition <i>Welfang Wang, Robert Lau</i>	A Method to Estimate Man Hours from Aircraft Maintenance Manuals <i>Manas Kulkarni, Blessing Adetomiwa, Ayodeji Akinola, Marc Launer</i>	Coupling Cabin layout and Fleet Transition: Interactive Analysis of Network-Level Fuel-to-PAX Ratio <i>Markus Rothkötter, Thomas Feuerle, Peter Hecker</i>	Runway-Aware Autonomous Landing via DDPG on a 6-DoF Aircraft Model <i>Melisa Nisa Aylayan Üzer, Barış Başpınar</i>
Poster ID 506	Poster ID 546	Poster ID 562	Poster ID 566	Poster ID 595	Poster ID E06	Poster ID E08	Poster ID E15
Shortest route method adaptation for a planetary rover motion with slope limitation based on Mars Express topographic data <i>Aleksandrs Kuzevanovs, Vladislavs Vasiljevs, Anna Ulivieniko, Sergejs Bratarcuks</i>	Analysis of the Stiffness and Dynamic Properties of the Wings of Dynamically Scaled Models and a Reference Aircraft <i>Młczarczyk Jarosław, Rogólski Robert, Olejnik Aleksander</i>	Exploring Feasible Translunar Trajectories Through a Modified Non-Coplanar Approach for Desired Orbital Parameters <i>Abdurrahim Muratoglu, H. Ersin Söken</i>	Turbo-engine tests with various SAP: Impact on non volatile Particulate Matter (nvPM) characteristics <i>Jean-Louis Champion-Reaud, Philippe Bouyer, Laurence Lombard, Ana Maria Cernocchi Pereira, Clarisse Doucet, Alain El Khoury, Guillaume Bidan, Nicolas Jeuland</i>	Lilienthal project: a Design-Build-Fly for Education and Applied Research <i>Emmanuel Bénard, Pierre-Alain Yvars, Antoine Lanthony, Yannick Pannier, Noureddine Guerassi, Rémi Azouit, David Rodriguez Velasco, Jean-Baptiste Daramy, Maxime Liege, Maxime Tolu, Clément Piffier, Diego Martinez-Gonzalez, Sassine Sassine, Kamika Saklecha, Salome Marques-Pereira, Alexandra Nieto-Castillo, Hui Yui Wong, Hana Hana-Shahir, Praseeth Sharma, Sébastien Leroux, Nabile Lawali-Ali-Gado</i>	A Hybrid 1-D/3-D Framework for the Design and Optimization of Ram-Air Ducted Thermal Management Systems in Electric Aircraft <i>Prasanna Multhukumaran</i>	Emotional State Assessment and Behavioural Response Analysis in Survivability-Critical Fighter Aircraft Scenarios <i>Ioanna K. Lekea, Dimitrios G. Stamatielos, F. Vokrakas, N. Tsanakopoulos, G. Nektos, I. Symeonidis, E. Spyrou, K. Toulou, V. Kappatos</i>	The Impact of Topography on Local Aircraft Noise: From Propagation Mechanisms to Modeling Requirements <i>Damian Maciorowski</i>
Poster ID E16	Poster ID E17						
A Parametric Reduced-Order Model for Rapid Flight-Envelope Loads Prediction of a Flexible Aircraft <i>Elias Allegaert</i>	Comparison of aluminum and POM projectile hypervelocity impact on Whipple Shield target <i>Abdulhamid H., Mespoulet J., Deconinck P.</i>						