

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

Final Agenda

DAY 1 | 27.10.2026

DAY 1 27.10.2026											
8:30 16:00		Registration									
9:00 9:15		Lecture Hall 1									
Conference Opening & Welcome Addresses											
KEYNOTE SPEECH											
EXAEUIA: pioneering European flying testbeds to drastically cut long-range flights' climate impact by 2050 by Mr. Martin Nagelsmit Netherlands Aerospace Center (NLR)											
Prof. Spiros Pantelakis Conference co-Chairman											
Signature of MoU between EUROAVIA and EASN Association											
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 Martin 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 (EXAEUIA Project) PART I	Innovation in UAVs: Design, Optimization, Flight Testing and Emerging Technologies PART I	Novel Propulsion Architectures	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)	Mr. Nicolas Tantal (SARAH Aircraft Engines SA, France) & Dr. Ralf von der Bank (Rolls-Royce Deutschland Ltd & Co KG, Germany)	Prof. Andreas Strohmayr (University of Stuttgart, Germany)	Prof. Christine Espinasse (SAE-SUPAERO, France), Prof. Alain Merlen (Lille University, France) & Prof. Michel Arigoni (ENSTA/IRD, France)	Prof. Timoleon Kipouras (Gronfield University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Prof. Joel Jézégou (SAE-SUPAERO, France)	Prof. Angelos Filippatos (University of Patras, Greece) & Ms. Ligelia Palati (German Aerospace Center (DLR), Germany)	Prof. Octavian Thor Pieter (University Politehnica of Bucharest, Romania)		
11:25	11:45	Experimental Aircraft for European Leadership in Aviation (EXAEUIA): Overview of first results and initial roadmaps Johan Kas , Timeone Paozda , Christoph Merken	Continuous Bi-directional trailing Edge Morphing using Hyperelastic Solid Hinges Jon Tikutsky	European aero-engine research policy from NPA Technology Cluster perspective addressing the upcoming 10th Research Framework Programme Ralf von der Bank , Nicolas Tantal	Configuration for Optimal Integration of Hydrogen Fuel for a Medium-Range Airplane Vishwanath Nagaraj , Robert Vos	Inputs for laser solutions for space debris mitigation in space transportation M. Schneider , H. Hichami , S.A.E. Boyer , M. Bouale , M. Arigoni , C. R. Phipps , S. Bouyah , S. Orlot , S. Paozda-Riera , F. Barthelet	Learning-based enhancement of augmented Lagrangian coordination for distributed multidisciplinary design optimization Edward Louis , Ahmed Bayoumy , Michael Kakalotas	The impact of circular economy on the future European long-range aircraft L. Palati , P. Panagiotis , D. Markatos , S. Pantelakis , G. Wendt , A. Filippatos	Design and integration of an AI-based ATC Communicator within a Digital Co-Pilot for Single Pilot Operations Yusef Mahmoud Elwan , Marika Radonovic		
11:45	12:05	Design of a SAF Long Range BWB in the frame of the European Project EXAEUIA J. Gourni-Ledogar , V. Pizato , C. Souciant , A. Trémolet , E. Nguyen Van , S. Defoort , M. Pechmann , P. Brunow , G. Starck , O. Alinaoui	Aerodynamic Performance of Droop Leading Edge Aerofoils at Low Reynolds Numbers Shreshth Kato , Khalil Jabbar , Humberto Medina , Mohammadreza Amoozegar	Revolutionary Propulsion: from an idea to a Proven Concept. And beyond? Arne Seitz	Assessment of Regional to Long-Range U2C Powered Aircraft with Conformal Wing Tanks Marc Engelmann , Chang Xu , Nils Roth , Barlas Tükyilmaz	Aeronautical composite structure dismantling using laser shock processing Bryan Butler , Aboultif El Mokli , Aloud , Michael Arigoni , Christine Espinasse , Serge Guetta	Detecting Critical Transitions in Aerospace Technology Systems Using Empirical Dynamic Modelling Massimo Panerello	Improving Efficiency and Modularity for the Certification of New Airborne Hardware Samuel Kleine	From sustainability criteria and LCA data to priorities for aircraft design: an introductory approach P. L. Y. Léonard , E. A. Amardisli , S. Ogut , S. I. Hallstedt , J. W. Nylander	Experiments with a Low-Cost True North Heading Sensor for General Aviation Octavian Thor Pieter , Irina Beutrice Pfeifferescu	
12:05	12:25	Conceptual design of a long-range aircraft with liquid-hydrogen propulsion and a bus-braced wing Lucas Kugler , Tobias Hecken , Carsten Uebersch , Mikael Minervino , Domenico Gugliemini , Giovanni Andreuzzi , Federico Cardoso , Victor Martin Sanchez	Experimental investigation of conjugated airfoils of low Reynolds numbers Wim Friedrichs , Michael Ammann , Patrick Jenni , Matias Barica	Challenges for integration of direct H2 combustion concepts in innovative aircraft layouts Vishwanath Nagaraj , Panagiotis A. Yakinthos , K. Doud , Nicolas Tantal	Design Criteria Definition of Liquid Hydrogen Fuel Systems for Aircraft Application Valentina Viladoz Quiñero , Jim Burschke , Jan Haenschich , Clement Foucault	Numerical modelling of the thermomechanical loading induced by electric fuel arc in aeronautical electrical network M.C. Henao Peralta , Rond , F. Longere , M. Macielista	The Value of First-Order Relationships in Decision-Making Process Timoleon Kipouras , Ola Isaksson , Anna-Maria Rivas McGowan	Forecasting the Socioeconomic Impact of Innovative Air Mobility: A Welfare Assessment Framework Martha Ghiorini , Anna Palatolaghi , Kyriaki Daskaloudi , Eva Palatolaghi	Eco-Efficiency Assessment of Hydrogen Aircraft API Maintenance Strategies: Integrating Economic and Environmental Criteria Dhruv Jignesh Upadhyay , Armand Al Pothay , Greta Wendt	GRAPH-DECIDE: A Graph-Based, Multi-Criteria Decision-Support Framework for Air Traffic Management under Delay and Capacity Uncertainty Bahi Concha , Paul Hernandez , Imari Shounpou , Josep Lluís Llanza-Pey , Marc Úcelayeta	
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	γ -[ϵ], 0-33T parameter and inflow turbulence condition tuning for conjugated airfoils at low Reynolds numbers Matias Barica	Ultra-thin and Thin, Slotted Adaptive Nozzle for Ultra-High Bypass Ratio Turbofans Nicolas Garcia Rosa , Nicolas Doud , Nicolas Tantal	Hydrogen shut braced wing aircraft: a common ONERA / Airbus evaluation and benchmark model Eric Nguyen Van , Lucas Kugler , Michael Kötzen , Enrico Stragazzi , Dimitrios Geras , Sebastian Wölter , Sebastian Defoort	Laser Ablation Propulsion for space debris removal: impulse generation by aluminum and role of irradiation parameters Battisto Pio	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 Jerome Tulip , Anna Biancotto , Ferran van Kan , Heider Xavier Nunes , Rui Dini-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 of the same time Panagiotis Pantelakis , Giuseppe Donelli , Carlos Caballero de la Haza , Hanno Mennens , Angelos Filippatos , Dionysios Markatos , Luca Boggess , Björn Nagel	Aggregated metrics for the evaluation of ATM efficiency Gabriele Siffori , Laurent Joly	
12:45	13:05	Modelling and preliminary design of liquid-hydrogen fuel systems for future long-range aircraft Enrico De Bello , Damiano Torroni , Michael Guglielmo , Francesco Mazzoni , George Lampeas , Lucas Kugler , Joseph Chan	Performance investigation of UAV Propellers via Wind Tunnel Testing A. Polychronaki , A. Chazouras , P. Panagiotou	Development of a Hydrogen-Fuelled Opposed-Free-Piston Engine Test Rig for Characterizing Performance and NOx Emissions Joseph Harper , Andrew Rolf , Gourav Singh , Vishal Sethi	Results of the PRECE Project: Liquid hydrogen fuel quantity indication systems for future aircraft Adnan Wölter , Volker Welling , Ali Aljiev , Yannick Portl , Kay Kochan , Oliver Burkhard	Assessing Post-Explosion Conditions in Space Launcher Breakup Scenarios for Debris Prediction Vincent F. Bellesque , M. Vio	Structured framework for innovative aircraft design with probabilistic solution spaces using Bayesian networks and the Advanced Morphological Approach Vladimir Trifunov , Emilija Bolakov , Andreas Bordenhagen	Certification of Hydrogen-Powered Aircraft: Lessons Learned and Mitigation Strategies for Risk-Informed Development Jerome Tulip , Anna Biancotto , Ferran van Kan , Heider Xavier Nunes , Rui Dini-Ferreira , Vincius Santini Lobo	Assessing Social Impact for Sustainable Aircraft Design through an SLCA Framework D. Markatos , A. Panagiotis , S. Pantelakis , A. Filippatos	Predicting Go-Around Likelihood: Towards the Development of an EASA-Compliant AI-Based Decision Support System Alejoa Erdogmus , Johann Maximilian Christensen , Frank Köster , Blanca Hoemann , Jörn Hallerbach	
13:05	13:25	Retractable Vortex Generators (RVG) Integration in High Lift devices A. Gazi , M. Minervino , F. A. Cardoso , V. M. Sanchez	A Fast Design Methodology for eVTOL UAV Propeller Considering Noise Emissions Jan Šimák , Mikolaj Śmida	Thermal Management in Emerging Propulsion Architectures: Opportunities and Design Challenges Catala Kato , Anders Lundblad	Optimized Dished-End Profiles for Lightweight U2C Tanks: An Analytical-FEA Framework Joan E. Alvaro Rodriguez , Rodrigo Gomez Vazquez , Laurent Tantar	Modelling of hypervelocity impacts of debris using a meshless gamma-g-p-h scheme Anthony Collé , Jérôme Limido	Adaptive Production Planning in Aerospace Manufacturing through the Integration of Knowledge Graphs, Simulations and Cyber-Physical Systems Thomas Haid , Philip Soltau , Yasmine Ghannajou , Jörn Bredemeyer	Scaffolding Regulatory Compliant Data Products for Aerospace Data Ecosystems Hennig Berg , Carsten Ippolito , Jonas Klumpp , Jérémy Mambrini , Achim Kollmann , Kai Lindow	Material Selection for 3D-Printed CubeSat Structural Subsystems Using a Multi-Criteria Sustainability Assessment Framework T. Kalampokis , N. Raptis , E. Bialas , D. Kaskalakis , A. Filippatos	Improved Aircraft Protection on Ground Through Heterogeneous Sensor Fusion: an Experimental Assessment Angelo Manca , Federica Virelli , Maria Carmela Masi , Marhuenda Giancarlo Delia , Gabriella Gigante , Piero Migliorini , Angela Vassallo , Paolo Venesio , Enrico Miccio , Rovito Causa , Roberto Ottomallo , Giancamille Fasano , Paolo Manuel Guadán Manzanares , Francisco Javier González Hernández , Francisco Javier Pérez Grau , Giovanni Frantini	
13:25	13:45			Reduced Order Thermodynamic Modelling of an Opposed-Free Piston Engine for a Composite Cycle Gas Turbine Aero Engine Kayratol Danielok , Joe Harper , Buchan Deneys Schreiner , Vishal Sethi							

13:25		14:30		Lunch Break											
ROOM	Lecture Hall 1	Lecture Hall 2	Lecture Hall 3	05-108	05-112	05-114	05-117	05-063	05-067						
Session Title	Experimental Aircraft for European Leadership in Aviation (EXALEIA Project) PART II	Innovation in UAVs: Design, Optimization, Right Testing and Emerging Technologies PART II	Hydrogen Fuels Cell, BECC and Hybrid Propulsion Aspects for Future Aircraft	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 CC in Aviation	Air Traffic Management (ATM) and Airports Subjects PART II						
Session Chair	Mr. Johan Kos (Netherlands Aerospace Center (NLR), Netherlands)	Prof. Kyros Yakinikhis (Aristotle University of Thessaloniki, Greece)	Prof. Carlos Xisto (Chalmers University, Sweden), & Dr. Anne Seitz (Bauhaus Luftfahrt, Germany)	Prof. Andreas Ströhmayr (University of Stuttgart, Germany)	Prof. Ernestina Ciancio & Prof. Ernesto Limón (University of Roma Tor Vergata, Italy)	Prof. Tamasleon Kipouras (Cranfield University, UK) & Prof. Olof Jakobson (Chalmers University of Technology, Sweden)	Mr. Charles Blondel De Jalogy (Dassault Aviation, France)	Ms. Ugeila Pollett (German Aerospace Center (DLR), Germany) & Mr. Daniel Kan (Netherlands Aerospace Center (NLR), Netherlands)	Prof. Octavian Thor Pieter (University Politehnica of Bucharest, Romania)						
14:30	Development of a Modular Flying Testbed for the Demonstration of Innovative Powertrains M. Ambrüst, D.P. Bergmann, N. Moede, A. Ströhmayr	Influence of payload on the design of a solar UAV to achieve year-round operations Hayden Mydland, Ruben E Perez	System-Level Modelling of a Reconfigurable Cathode Air Supply System for a Hydrogen Fuel-Cell Electric Regional Aircraft T.S. Lufen, F. Auciello, J. Biehnauer, R. Heukens, A.J. de Boer	Comparative Analysis of Energy Management Strategies for Battery-less Multi-Stack PEMFC Systems in Regional Aviation Bing N. Cornelie Bösch	Energy-Aware Opportunistic Connectivity for Earth Observation Satellites Using Commercial LEO Megaconstellation Relays M. A. Kozlowski, M. De Sanctis, T. Rossi, C. Edoardo	Utilising AI and LLM for AI/ML enabled construction Pete Hinton, Alexander Katschauer, Peter Tarnier, Scott Ferson	Analysis of regulation gap and risk for disruptive aviation concepts: CONCERTO methodology Joël Jaeger, Alexander Kieß, Sergio Palazzi, Christel Seguin, Jürgen Amann, Giovanni Ciolli, Edoardo Simonone, Julie Benoit, Anupam Ashishank	Life Cycle Assessment of the HROPS 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 4- to 1000 suborbital operations in ATM using EUROCONTROL-based risk modelling Erico A., Travacca I., Vizzetto A.						
14:50	Multi-Scale Flying Testbed Strategy for Supporting the Development of Long-Range Liquid Hydrogen Turbines and Wing Aircraft Ferozan van Kan, Kathleen Decker, Andrew Jansen, Roger Ballester, Christel Martens	Drive Train Architectural Considerations and Design for the DLR High-Altitude Platform Daniel Ackermann, Patrick Ackermann	Test Results for a 500 kW Hydrogen Fuel Cell-Electric Powertrain for Ground Demonstration T. Lufen, A.K. de Nijerhuis, R.C. van Berntem, D. Völsinger, A. Pöw, T. Mätzl, G. Tölgner, S. Pauer, R. Schwarz	Thermal-Structural Modelling and Optimisation of LHV Core Sandwich Tank I. Valoti, C. Geyser, & Gerhard, K.U. Schieder	Adaptive Reproposing of Spaceborne Imaging Platforms for Non-Earth Observation Alessio Spaziale, Antonio Vito Morabito	Expert-in-the-loop Explainable Artificial Intelligence to Support Design Engineering Decision Making Symon Babek, Giorgos Nafets, Tamasleon Kipouras	Toward Certification by Analysis for Aircraft Systems: Early Insights, Challenges and Opportunities from Initial Research Use Cases Florian Jaeger, Andreas Schiffer	A combined LCA and noise comparison of hydrogen-fueled modes on the typical in-flight European routes L van Don, E. Schreurs	A Teamwork Assistant for Adaptive Human-AI Collaboration in Air Traffic Management: Findings from the DAAPC Project Matthias Grais, Bertille Simon, Soufiane Saadouni, Marco Emme, Nylund, Eric Gastal Nilsson, Martin J. Doolan						
15:10	Multiscale Modular EWB TB Design Requirements and Benefits W. Widge, A. Gao, C. Lawson, C. Villena Muñoz, O. Nistor	Energy harvesting from atmospheric voltages E. Foglia, J. Mai, M. Schettler, J. Bordenave-Gubé	Design methodology for hydrogen-powered hybrid propulsion system architectures for short-range aviation Daniel Velasco-Perez, Marcos Lopez-Juarez, Ricardo Navarro, Joaquin Gomez Solana	Numerical study to assess the crashworthiness of a composite conformal UHJ tank Barn Noadman, Remi Urbès	Robustness-Driven Design of W-Band GSN LNAs for Next-Generation Satellite Receivers A. Mostafaei, A. Colangelo, P.E. Longhi, W. Ciccognani, A. Serrao, E. Limati	Visual Analytics-Enabled Design Space Exploration of Aircraft Configurations from Top-Level Requirements Shubham K. Srinivas, A. Kipouras	Damage Models of Multiple Landing Scenarios for Visual Testing and Qualification/Certification by Analysis Alberto Aste, Pedro J. Cunha, Derys Dall, Paulo Teixeira Gonçalves	Introducing a new aerospace-specific life cycle assessment inventory Michael P. Weiland, Achille Laurent	Massive Cherry-Picking Multi-Objective Air Traffic Flow Management Through Lexicographic Optimization, Trade-Offs, Analysis and Fine-tuning Marcos Moreno Solana						
15:30	On-Ground Common Infrastructure and Data Measurement Approach Supporting EXALEIA Flying Testbed Experimentation A. Vitale, J. Ochoa, A. Borelli, K. Grogger	System Identification of a Lifting Body Fixed-Wing UAV under Data Quality Constraints Luigi Li, Pansy	On the Implementation and Assessment of the Solid and Permeable Flows Williams-Hawkins Surface for Contra-Rotating Open Rotor Aerodynamics T. Tsoukatzis, A. Galarandou, P. Oikonomou, A. Gkourizanis, A. Kafas	Capacity Scale Effects in Power-to-Liquid Sustainable Aviation Fuel Production: A Techno-Economic and Project-Finance Assessment Kuba Ogrym, Hulya Cebeci	Dual-Band Ku/Ka Low-Noise Amplifier Model Development for Future Flexible Satellite Payloads Parand P., Colangelo S., Longhi P., Limati E.	Beyond Visualization: Explainable AI for Complex Data Exploration Rafael García Sánchez, Antonio Mancini	Virtual EMA-Based Model Validation of the CONCERTO Aircraft Actuation Test Bench Alexandros Papadimitriou, Katerina Katsoulidou, Panagiotis Katsoulidou, Vasilis Lamprou, George	A Novel Life Cycle Impact Assessment Method Tailored to Aviation Emissions Félix Pollet, Thomas Ponsard	Towards a more Realistic ATCO Briefing – key elements, implementation roadmap and alignment with current regulations Michael Finkler, Jeroen Meier, Marco Temme						
15:50	High fidelity static aeroelastic analysis of offshore sparwise effectiveness in flexible HAA wings Andriy Ponomarev, Romela Bugalia, Magdalena Gronowska, Peter Abramozius, Evangelos Piliadis, Arif Sadiq, Andrew Jürisson, Hubert Temmermans	Influence of Servo Actuator Power Supply on the Modal Characteristics of an Unmanned Patrol Aircraft during Ground Vibration Testing Szechenyi M., Rogalski R., Górecki A.	Rechargeable Battery-Integrated Islanded Grid Architectures for Highly Electrified Polymer Composites Andrea Reindl, Georg Altmann, Francisco van der Linden	AFPEL – Analysis of Hydrogen Permeation Properties of Fiber-Reinforced Polymer Composites for High-Pressure Hydrogen Storage under Cyclic Loading Tom Blümel, Robert Kuhn Sahr	Integrated Evaluation of Radiation, Thermal and Altimetric Oxygen Effects on Structural Materials for Low Earth Orbit Satellite Applications David Teylan, Armin Yanik, Sara Ilgazovic, Ilmur Bayraktoglu, Harid Grant	From Kerosene to Hydrogen: Experimental Foundations for Future Aviation Fire Standards Rini Baliet	Gauging the developments from environmental risk assessment to critical decision support, possibly as the life cycle impact assessment, surfaced in simplified life cycle assessment in aerospace John Simpson, Torsten Mott, Maud Lemaignon	A Numerical Testbed for Analyzing Air Traffic Controller Experience Complexity Joao Meire, Marco-Archael Temme, David Seiwald							
16:10	Comparative impact assessment of a future long-range aircraft with an entry-to-service in 2050 – Preliminary Assessment Framework & Results T. Paccato, P. Ratti, L. Paselli, D. Mantovani, A. Pasquonone, A. Rissotto, F. Petrucci, M. Soranzo, J. Page, M. Ambrüst, B. Dangel, W. Lammens, E. Schreurs, D. Kan, G. Gagliati, T. Zili	Strength analysis of the structure of an unmanned water surface – aerial platform that utilizes the wing in the ground effect mode of composite materials Georg Altmann, Georgiy Rykocewski Dariusz		CryoOAD – An Open-Source Cryogenic Tank Thermal Model for Overall Aircraft Design Roman Jan, Jean-Marc Moschetti		On AI-Enabled Quality-Oriented Manufacturing Process Steering Emmanuel Stathakis, Panagiotis Georgiadis, George Chaitopoulou Vamvakos	Environmental performance of a single-use FET material for one-piece OEP oil-lubricated: A comparative life cycle assessment Fabian Fink, Sabina Ditz, Karina Knos	Operational Validation of Flow-Centered Regulation Planning for Pre-Selected Air Traffic Flow and Capacity Management Zhengyang Wu, Trifon Hoang, Matteo Cavallieri, Lella Zengoli							
16:30	A Holistic Sustainability Assessment framework for Aircraft Conceptual Design A. Piliadis, D. Mantovani, G. Lamprea, S. Pantelidis														
16:50															
17:30															
Students & Young Researchers Networking Event															
Poster Session Tour #1															
End of the 1st Day															

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Final Agenda

DAY 2 | 28.10.2026

8:30 17:30		Registration									
ROOM		Lecture Hall I									
	9:15 9:30	Signature of MoU between the EASN Association and the Swedish Aerospace Research Center (SARC)									
	9:30 10:00	KEYNOTE SPEECH Challenges for the future of avionics by Dr. Denis Bonnef Thales Group									
	Chaired by	Prof. Andreas Strohmayr Conference co-Chairman									
10:00 10:30	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 FART I	Innovation in UAVs: Design, Optimization, Rigid Testing and Emerging Technologies FART II	Innovations in Aerospace Propulsion Systems FART III	Aviation's CO2 and non-CO2 emissions: 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 FART 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 FART II	
Session Chair		Dr. Thomas Reichert & Mr. Peter Branch (Fraunhofer-Gesellschaft, Germany)	Prof. Pericles Panagiotou (Aristotle University of Thessaloniki, Greece)	Dr. Christos Mourouzidis (Cranfield University, UK)	Mr. Georgios Bompotis (European Climate, Infrastructure and Environment Executive Agency - CINEA)	Mr. Jonas Eisenmenger (DFK GmbH, Germany)	Prof. Timoleon Kipouras (Cranfield University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Prof. Liberato Guadagno & Dr. Raffaele Longo (University of Salerno, Italy)	Mr. Patrick Kotel & Mr. Pravej Patil (German Aerospace Center (DLR), Germany)	Prof. Octavian Thor Pieter (University Politehnica of Bucharest, Romania)	
					The UNIC Project Objectives, Methodology, and Current Progress Ortega I.K., Berthier A. I., Bilyard D., Cirva F., Smallwood G., Owen B., Bellouin N., Croxford A.S., Durand E., Duplatay J., Myllys H., Kinnikid T., Olenka T., Brown A., Nicholas L., Corbin J.C., Jatal N.O., Saukko E., Nijsschewski L., Schrip T.	Overview of AI methods and review of the current state of the art in space applications Mehmet Akbulut, Wabke Brinkmann, Nayat Marie Lessa, Jonas Eisenmenger, Udo Frese	A data-driven method for smart wind tunnel testing planning Spinnell A., Kipouras T., Greenwell D.	Bridging Recycling Technologies and Material Design: Pathways for Sustainable Epoxy Composites Liberato Guadagno, Raffaele Longo, Mariadulga Ramonda, Luigi Veruccchio, Rosamaria Russo	Enabling End-to-End Aviation Impact Assessment through a Digital Collaborative Framework Andreas Marcell, Moritz Aider, Raul Garcia Sanchez, Tawfik Ahmed, Panagiotis Panitakis, David Wichter, Patrick Rote	Innovation and Sustainability Efforts in Qatar Air Traffic Management and Remot International Airport Awalya Junior Chango	
10:30 10:50		Eco-Design and Life Cycle Assessment for Hybrid Electric Aircraft Thomas Reichert, Peter Branch, Gabriela Gramer	Airframe Multidisciplinary Design, Analysis and Optimization in Early Design Stages using a Standardized Parametric Aircraft Description Ogundimu Peterson, Sebastian Dennerl	Assessment of Alternative Fuels and Tank Integration Across Aircraft Configurations Sergio Jimeno Albaladejo, Utkarsh Gupta, Christos Mourouzidis, Afif Riaz							
10:50 11:10		High level ICA of low impact aircraft developed in Clean Aviation H2020 project Marco Rinaldi, Felicia Molinaro	Surrogate-Based Aerostructural Optimization of a Composite Low Reynolds Number UAV Wing Spyridon Kinnikidis, Berthier Nikolaou, Panagiotis Kevrenkoglou, Vasilas Lapanas and Vasilis Kostopoulos	Engine-Aircraft Integrated Design for Hydrogen Propulsion, Application to a Family of Small to Medium Range Aircraft Rezaul 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 ACClimate project Marc E.J. Zeffer, Joel Ponsard, Daniel Sauer, Johannes Schneider, Benjamin J. Murray, Jack MacGill, Alexander Vogel, Florian Ungeheuer, Julia David and Christiane Vogl	LunarCobot: Development of Servicing Modules for Multi-Robot Operation Scenarios on the Lunar Surface Gowah M., Al-Bawars A., Ben Rajba, Y., Cai D., Dert F., Gorka L.H., Kabbie J., Kalla N., Koenig C., Lin K., Matal M., Prong L., Sahli P., Sauerzapf R., Schur J., Wagner H., Weismann S., Zimmermann T., Klinkner, S.	Interface Design and Digital Twins for Dimensional Control in Composite Assemblies Krisina Wärmefjord, Mikael Stenstam, Diego Tapado	Reprocessability by Design: High-Performance Bio-Based Epoxy Vitrimer for Fiber-Reinforced Composites Liberato Guadagno, Francesco Alberti, Luigi Veruccchio, Mariadulga Ramonda, Roberto Panfili, Raffaele Longo	Operationalizing Impact Assessment Studies from Study Definition to Implementation Thierry Lefebvre, Andreea Mancini, Afif Riaz, Michel van Benige, Afif Junior, Patrick Rote	Validation of HYCON Multi-Link Architecture for Resilient Surveillance Faahil Prayagani, Lena Kolb, Giancarlo Gelao	
11:10 11:30		Analysis on critical and relevant raw materials for hybrid electric aircraft applications Peter Brantich, Gabriela Gramer	Applicability of Graph Neural Networks on Surface Field Predictions of Subsonic UAV Wings Georges Ehem, Chris Pilakos, Pericles Panagiotou	Integrated Multidisciplinary Assessment of a Composite Low Reynolds Number UAV Wing Sara Alota, Christos Mourouzidis, Ioannis Roumeliotis, Pavlos Rompokos, Vasilis Pachidis	Environmental impact of a hydrogen-optimized multi-fuel propulsion system (HOPE Project) Fello Yin, Clemenstin Leon, Francesca Di Domenico, Arvind Gangoli Rao, Benjamin Peraval, Ling Lim, Adrian Muslic and Moritz G. Kolb	Multi-Scenario Optimization of PID and Fuzzy Controllers for Airborne Altitude Control Christian Flores-Rodriguez, Ali Anshadi, Juan Carlos Crespo, Mario Rios, Karl Olfe	Data-driven multiscale modelling of buckling metamaterials for vibration mitigation and protection of onboard electronics Daniel Yago, Diego Abad, Oriol Llobera-Valls, Javier Oliver, and Juan Carite	Towards Smart Nylon: Electrically Responsive PA6 Composites for Aerospace Applications Guadagno L., Longo R., Alberti F., Ramonda M., Catasura M., Veruccchio L.	Multi-Fidelity Aircraft Modelling for Integrated Impact Assessment of Technology R&I Sergio Jimeno Albaladejo, Afif Riaz, Christos Mourouzidis, Utkarsh Gupta, Felix Brenner, David de la Torre, Patrick Rote	Environmental aspects of the Airport Operations Center: current state and future perspective Inbal Hada, Yael Dörflinger, Jan Krichel, Oliver Polting, Marcel Puls	
11:30 11:50		Life Cycle Assessment of Aircraft Wing Structures: A Comparative Study of Aluminium and Carbon Fibre Composites Kekewengjiu P., Stavropoulou K., Kinnikidis S., Neumann de la Cruz Debarco, Rodriguez M., Kostopoulos V., Ptasos S.	Aerodynamic shape optimization of airfoils under geometric constraints Ali Anshadi, Dinusha Nelluven, Wijesinghe Wijesinghe Appunahilage	CFD-Based Mission-Level Assessment of Powered Engine Installation Effects for Innovative Medium-Range Aircraft Propulsion Odysseas Zlogas, Spyridon Antoniou, Pericles Panagiotou	Latest findings from large passenger aircraft emission measurement campaigns and PACIFIC follow-on activities K. Seeliger, C. Bernad C. Volgraf, G. Eckel, J. Green	Inertial Parameter Identification for the NASA Airborne Free-Flyer Ali Anshadi, Cristian Flores-Rodriguez, Mario Rios, Juan Carlos Crespo, Karl Olfe	Determination of material model parameters for composite materials for aircraft structural design using machine learning Q. Abboud, F. Höhnert, J. Mankemiller	Towards Greener Aeronautical Composites: The Promise of Electrocutting Liberato Guadagno, Roberto Panfili, Raffaele Longo, Luigi Veruccchio, Francesco Alberti	Preliminary Impact Assessment Studies of Flight Operational R&I: Current Progress and Insights Michel van Benige, Afif Junior, Peter Hoogen, Ronald Gramann, Sreyashi Chatterjee, Mostafa Ciaccioceanu, Andreea Mancini, Patrick Rote, Thierry Lefebvre, Jordi Pons Prats, David de la Torre, Inge Moeyers	Multistatic Passive Radar for ATM Surveillance: a simulation study in relevant environments Alberto Ariano Rogel, Maria Simenholzer, Carla Mancini, Alexandru Filip-Draughadel, 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, Mikko Riekkio, Marco Fioriti	Two-Way Fluid-Structure Interaction Framework for Synthetic Jet Actuator Modelling I. Agorval, M. Jabbal, A. Popov, J.P. Rouse	Preliminary Analysis of the Failure of Aircraft with new Propulsion System for the Purpose Maintenance Blessing Adetunmbi, Alinda Ayodeji, Kulmani Mania, Johannes Behrer, Marc Louner	ESCAPE: A transportable control chamber Duplitz J., Kulkarni Vaara H., Kuntz P., Huuskonen U., Kallinen V.S., Rign C., Boman T., Petaja T., Naukkiminen E., Aho A., H. Fougereau, B. Martinez-Rozel, R. Moreau, C. Guvet, J. Ramon Mantilla	Reference Scenario and Operational Concept definition for In-Space Assembly and Manufacturing Platform Raphael Bolsonnade, Nicola Guercio, Mathieu Deremette	Influence of 3D-Printed Mesh Energy Structures on Heat Generation in Ultrasonic Welding of Carbon Fiber-Reinforced LWFAX Laminates María Juaneley Muradas, Mohan Baburani, Massimo Milano, Russello	From Waste to Resource: Green Chemical Recycling of Bio-Based Epoxy Composites Lorenzo Bonadoni, Elisa Cabanero, Pasquale Longo, Annalucia Marcondado, Liberato Guadagno, Mariadulga Ramonda	Preliminary Impact Assessment Studies of Flight Operational R&I: Current Progress and Insights Afif Junior, Michel van Benige, Sreyashi Chatterjee, Mostafa Ciaccioceanu, Zilvana Zhuravka, Andreea Mancini, Patrick Rote, Peter Hoogen, Ronald Gramann, Claire Sarrat, Thierry Lefebvre, Jordi Pons Prats, David de la Torre, Inge Moeyers	Altfield: Regulation-Aware AI-Assisted FOD Reporting in Airport Operations – A Zagreb Airport Case Study Kouvalis I., Milutin N.M., Tsoumpas A., Jellens V., Ziljanovic I., Juno M., Damjanovic M., Quang T., Buhari N., Ioannidis K., Vrochidis S.	
12:10 12:30		Open Discussion	From Drone to Sports Aerodynamics: A Road to Olympic Medal Ali Anshadi, Dinusha Wijesinghe, Tomi Kaldatos	Open Discussion	Open Discussion	ASPERA – Autonomous Spacecraft Pose Estimation with Rastered and Augmented Images: A robust VBM for Autonomous Spacecraft GNC in non-cooperative scenarios N. Andras, H. Fougereau, B. Martinez-Rozel, R. Moreau, C. Guvet, J. Ramon Mantilla	Toward the industrialization of sequential ultrasonic welding for aerospace sector Mohan Baburani, Massimo Milano, Russello, María Juaneley Muradas, Enrico Chennello, Benito Serna Rodriguez	Synthesis and development of inherently highly flame-resistant nylon for aerospace applications Veronica Balzano, Raffaele Longo, Liberato Guadagno, Pasquale Longo, Annalucia Marcondado	Assessing Near-Future Pathways for Sustainable Air Transport: An Impact Assessment Approach for Fleet Renewal and SAF Deployment Patrick Rote, Melissa Kühnle, Antonia Pasquale, Claire Mattheo, Michel Guillaume, Danyalis Markatos, David de la Torre, Jordi Pons Prats	Meteorological Operating Limitations for a Regional Air Mobility Network Tim Schumler, Lukas Aigner, Nico Rülthmann, Wolfgang Gimmie, Alexandra Leopold, 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 I	Digitalization of Manufacturing, sustainable manufacturing, multifunctional structure and MKO PART I	Circular Economy in Space	Data-Driven Engineering Design for Aerospace Manufacturing and Systems PART IV	Innovative Bioactive Morphing for disruptive and sustainable wing design	Hybrid Electric Regional Fuselage & Empennages (HERUSE Project) PART I	Air Traffic Management (ATM) and Airports Subjects PART IV	
Session Chair	Dr. Thomas Reichert & Mr. Peter Bransch (Fraunhofer-Gesellschaft, Germany)	Prof. Petros Panagiotou (Aristotle University of Thessaloniki, Greece)	Dr. Christos Mourouzis (Oxford University, UK)	Mr. Georgios Bompas (European Climate, Infrastructure and Environment Executive Agency - CINEA)	Dr. Kai Lindow (Fraunhofer IPA, Germany) & Prof. Miguel Olivares-Mendez (University of Luxembourg, Luxembourg)	Prof. Timoleon Kipouras (Oxford University, UK) & Prof. Ola Isaksson (Chalmers University of Technology, Sweden)	Dr. Marianna Brazo (CNRS, France)	Mr. Fabrizio Leone (LEONARDO, Italy)	Prof. Octavian Flor Pieter (University Politehnica of Bucharest, Romania)	
13:30	Environmental Impact assessment of a fuel Cells Stack in ELECTROPLAN-TBC project Mario Antonio Solazzo, Lidia Trivacchio, Angela Vassella, Antonia Rogano	Fast Lane Drone Development: How Drone manufacturers can easily test their systems without the need of a specific category approval Jan-Fredrick Schön, Paul David Lieten, 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 Panika, Stefano de Graaf, Jan Jansen, Daniel Ewald, Panos Laskaridis, Askin Isikveren	Towards LES-Assisted Turbomachinery Design (SCI-FI-TURBO Project) Michael Bergmann, Georgios Solakis, Sufyanon Satcumsaran, Alexander Bieh	Environmental impact of large constellations using the space debris THEMIS indicator Michaëlle M., Muciaccia A., Lück D., Retagne W., Colombo C.	A Holistic Sustainability Framework for Early-Stage Aircraft Conceptual Design Using Bayesian Networks D. Markatos, T. Kipouras, A. Spinelis, A. Rippas	Experimental investigation of the aerodynamic performance increase of an A320 morphing wing prototype in subsonic regime Abou Khalil A., Agapoulas I., Maynard N., Delon X., El Akrouy R., Haman G., Dall C., Rouchon J., Brazo M.	Innovative Fuselage Structural Concepts for the Integration of Hydrogen Technologies into Regional Aircraft Ana Sánchez-Algera, Gabarrat Neumann de la Cruz, María Rodríguez-Montes	Advanced conflict resolution algorithms and operational scenarios in ASAS simulator Catalin Iose, Ana-Maria Borsdei, Mihnea Dija	
13:30	Environmental Impact assessment of the innovative Long-Range Aircraft in EXAEIA project Mario Antonio Solazzo, Lidia Trivacchio, Angela Vassella	A Multi-Criteria Decision Framework for Operational Benchmarking and Capability Optimization of Unmanned Aerial Systems Stylianos Adamidis, Beffertus Kavazas, Michail Kordis, Gavril Gavrilakis, Nikos Monokroussos, Kyriakos Grammatikakis	Objective-Based Energy Management Strategies for Hybrid Electric Propulsion Systems Evangelia Panika, Panos Laskaridis, Timos Kipouras	Numerical Modelling of Fluid-Structure Interaction on Wings and Aeromechanical Structures in Realistic Conditions (FALCON Project) Denis Ricof, R. Joerges, I. Cheylan, J. Jacob, R. Cuvard, Y. Deland, J. Jover	A Preliminary Requirements-to-Design Framework for Circular Satellite Systems T. Kalompos, D. Markatos, A. Rippas	Adaptive Test Prioritization for Drone Communication Software: A Combined Bayesian Contextual Bandit Approach Guillaume Clossau, Jean Kamwari, Samuele Romello, Morten Larsen	Aerodynamic performance increase through numerical simulation of a morphing A320 wing prototype in transonic regime Abou Khalil A., Agapoulas I., Maynard N., Delon X., El Akrouy R., Haman G., Rouchon J., Brazo M.	Innovative Floor Structure Concepts and Enabling Technologies for the Integration of Hybrid-Electric Regional Aircraft Marc Mineur, Bob Everaert, Tom De Beyer, Steven Van Camp, Rikard Fiaz	Simulation-Based Assessment of TBO and ACAS Concepts Sandra Nischler, Catalin Iordache, Alexandru Dobrescu, Catalin Iose	
14:10	Life Cycle Data Management in Aviation: Attributional and Prospective LCA approaches - Example of an Aircraft Rudder Material and its Associated Data Gaps Peter Bransch, Aude Marie Bechu, Sven Wuestenaggen, Ralf Schlimper, Alexis Laurent, Carl-Christoph Höhne	Connectivity Constrained Risk-Aware Planning and Monitoring Framework for BVLOS UAS Operations Stefano Pinnatelo, Gianluca Scopelliti, Luca Testa	Operability Analysis and Control Structure Characterization of a Gas Turbine SOFC Hybrid for Hydrogen-Fuelled Commuter Aircraft Muhammad Hammad Shaikh, Evangelia Panika, Angelos Joliotas, Panagiotas Laskaridis	Overview the EU ROSAS project: Robust simulation Systems exploiting AI based turbulence models and high-fidelity algorithms Vincent Couvillier	Toward Circularity in Space: Evaluating and Operationalizing the Circular System Framework for Satellite Reuse Brend Michael Wells, Mohamed Elbouni, Anja Öhnwall Rönnbäck, René Lauffer	Evaluation of Data Driven Architectures for Virtual Thermal Sensing in Breakers Motors Using Fiber Bragg Grating Sensors Brett Schaus, Antonio Costantino Marcondo, Matteo Bertone, Alessandro Almazo, Bartolomeo Monticchio, Paolo Maggiore, Matteo Davida Lorenzo Dalla Vedova	Numerical study of travelling and standing wave morphing on an A320 wing prototype in subsonic regime of Reynolds number of 1 million El Akrouy R., Agapoulas I., Maynard N., Delon X., Abou Khalil A., Marouf A., Haman G., Rouchon J., Brazo M.	Topology optimization of aircraft fuselage frame Bartosz Kozel, Rafal Lurawski	Air risk assessment for long-range UAS operations under U-space Patrick Le Blaye, Christel Seguin, Italiano Prosserova, Sergio Pizzi	
14:30	Screening Life Cycle Assessment of Bio-based Composite Access Panels for Trainer Aircraft: Environmental Hotspots and Future Circular Pathways Gyu-Eun Cho, Torsten Müller, Ahmed Mazyar, Marvin Vell, Korhan Jahn	Altitalia for Small UAS Certification: A Model-Based Safety Analysis Approach to AEP-B3 Olivier Comas, Italiano Prosserova, 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 Maksim Klichikov, Yuri Ushenko, Igor Kravchenko	Digital Twins of Composite Parts: Structure and Data Acquisition along the Life Cycle (TOSCA & COMPASS Project) Julian de March, Erik Boelbergen, Anemoon de Groen, Anne van Vught	Solar-Cycle Effects on Satellite Disposal Compliance in Low Earth Orbit Diryo Manivannan	Dynamic Modulation Switching and Real-Time Kalman Filtering for Airborne B30-Based Localization in High-Power Rocketry Missions Dimitri Agapoulos, Corina Kyriakou, Antonio Kyriakou, George Chatzopoulos, Anna Christina Markaki, Konstantinos Drakakis, Maria Roukina	Numerical analysis of embedded actuators effects on an A320 morphing wing prototype for aerodynamic performance enhancement R. Gauthier, Y. Hamadou, Marouf A., Brazo J. Vos	Manufacturing Strategy for an Integrated Composite Fuselage Lateral Panel with one-shot Liquid Resin Infusion Enric Cerezo, Peio Olaskoaga, Mariam Garagandab	Real-Time Distributed Client-Server Simulation for Trajectory Management of UAS in a Structured Urban Airspace Network Ana-Maria Borsdei, Florentin Spelea	
14:50	Economic and Environmental Feasibility of Hybrid-Electric Commercial Aircraft Chung-Hwan Liu, Florent Lutz	Validation and Deployment of RF and Remote ID Sensor Systems for Monitoring U-space traffic Cédric André Bédou, Dick Bouwhus	Low-temperature PEM fuel cell air supply system architecture optimization for regional aircraft F. Acone, J. Brocheval, A.L. de Boer	Composing Digital Product Passports to Support Remanufacturing in Aviation (COMPASS Project) Julian de March, Erik Boelbergen, Anemoon de Groen, Anne van Vught	An Optimization Framework for the Conceptual Design of Hybrid Microsatellite Launch Vehicles with Environmental Assessment Giovanna Mosse, Iara Aguiar, Alain de Souza, Frederico Afonso, Fernando Lou	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. Hamadou, Jean-François Rouchon, M. Brazo	Data-Driven Models for Aeromechanical Design and Optimization Gonzalo Rubio, Fermín Gutiérrez, Miguel Jaritz, Angel Ladrón, David Ramos, Miguel Sánchez-Domínguez, Nicolás Becerra Zuriga, María Amabali Martín, Andrés Mateo-Galán, Sven A. Lanzani Ferran, Javier Rosalen, Fernando R. Sánchez, Lucía Lacort, Eusebio Valero	Automatic Unmanned VCA Operations in Mixed Airspace Environment: the Case of OFEPA Project Boyan Iliev, Marko Rodanović	
15:10	Open Discussion	A Microservice Architecture for UAM Real Control Stations in U-space Environments Enzo Nagel, Sahar Singh, Miguel Angel Fdz Millán	High-Temperature PEM Fuel Cells for Hydrogen Aviation: Technology Evolution and Integration Perspectives Marten Flay, Ulf Koppert	Circular recycling of thermoplastic composite laminates (Complisat Project) M. Wilms, K. Schür, S. Henkshöfer, Dr. H. Jansen, Prof. Dr. C. Brecher	Managing Requirements Uncertainty in Early-Phase Spacecraft Design: An Expert-Informed Approach to Design for Spacecraft Reuse Bernad Michael Weiss, Anna Öhnwall Rönnbäck, René Lauffer	Data-Driven Calibration of GEXO Turbulence Model Coefficients for Transonic Aerodynamic Flows Nicola Pizzanti, Andrea Ferrero, Viola Roszani, José Guerrero	Machine-Learning-based Reduced-Order modelling of a travelling wave morphing system on an A320 wing prototype Maynard N., Marouf A., El Akrouy R., Abou Khalil J., Hamadou Y., Rouchon J., Brazo M.	Open Discussion		

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Final 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	Prof. Spiros Pantelakis 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. Marline Sainte-Marie Elies Baugent Association								
Panelists									
Moderated by	Ms. Glòria Venturini SAFRAN Group, France								
10:30 - 11:00	Coffee Break								
ROOM	Lecture Hall I	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 (exFen Project)	Advances in Hybrid-, Cryo and More Electric Aircraft Technologies for Ultra-Electric 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 Optimisation (MDO) PART I
Session Chair	Dr. Belén García-Blanco (CIDETEC, Basque Research and Technology Alliance (BRTA), Spain)	Dr. Andreas Bottenberg (Fraunhofer, Germany)	Mr. Guillaume Borely (Honeywell, Czech Republic)	Mr. Georgios Bompats (European Climate Infrastructure and Environment Executive Agency - CINEA)	Dr. Andreas Stumm (Bohbus Luftfahrt, Germany)	Dr. Carlos Coboledo de la Hoz & Mr. Francesco Torigiani (German Aerospace Center (DLR), Germany)	Prof. Teresa Morgado (Polytechnic University of Lisbon, Portugal)	Dr. Sebastian Splitzer (TU Dresden, Germany)	Prof. Joseph Morlier (ISAE-SUPAERO, France) & Prof. Nathalie Barthel (ONERA, France)
11:00 - 11:20	Parametric Composition of Heat Dissipation Architecture for Fuel Cell Electric Aircraft Matthias Ronovsky-Bodisch, Niccolò Ferrari, Bernhard Geil, Martin Beners	Why One Battery is Not Enough: Architecture-Driven Optimization of Propulsion, Non-Propulsion and Reserve Energy Systems in Future Single-Axis Aircraft Andreas Bottenberg, Holger Meindl, Martin Wenger, Florian Hilpert	A Mission-Level Simulation Framework for Integrated Thermal Management of Hybrid-Electric Aircraft Power Systems Tobias Reischl, Corinna Lepold	High-Pow Liquid Hydrogen (HP2) Refueling for Aviation: Preliminary Results and Technical Developments from the GCUAT Project Jean-Christophe Hugot, Peter Colvert, Louis Steiger, David Audec	Jet fuel production via hydrothermal liquefaction of agricultural residues: Economic and environmental performance Leonard Moser, Christina Henke, Valentin Bettegger	Application of Open Digital Platform to the Design and Verification of Hybrid-Electric Regional Aircraft Andrea Terracciano, Pierpaolo Barrelli, Clifford Dornio, Alessandro Elias, Francesco Torigiani, Gerardo Carbonaro, Vito Primavera, Alfredo Benatti, Fabien Bertho, Novella Saccenti, Carlos Coboledo de la Hoz	The Impact of Additive Manufacturing in the Aerospace Industry: Challenges and Opportunities Teresa Morgado	Battery System Development to Empower Electrified Aviation Within CS23/AVIATION Florian Franke, Alperen G. Altun, Maurice L. Doherty, André Vetterlein, Stefan Kozula	Reliability-based Overall Aircraft Design using GEMSO Matthias De Looze, Nicolas Roussouly, Olivier Sapia
11:20 - 11:40	Fuel Cell Thermal Management - overcoming high heat loads without overrating heat exchangers Di Christophr Grotz, Philipp Jordan, Di Lorenz Brumann, Di Matthias Ronovsky-Bodisch	On the Existence of Long-Range Hydrogen-Powered Transport Aircraft Moescheff 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, Tessa Kongsongkro, Jeeung Kwon-Hye, Michael Moeller, El Hassan Ridouane	An Assessment of Turnaround Time, Logistic and Safety Distances for LH2 refueling in Airport (ALBIST Project) Francesco Mastropiero, Giovanni Apuleo, Damiano Tormen, Ida Nofri, Matteo Giampardo, Alessia Angiolini, Daniele Santini	Sustainable Aviation Fuel from Sunlight and Air: Progress and Perspectives Moritz Alexander Thiel, Christoph Fohrer, Alex Pargmann, Peter Schwarzbühl, Heider Hussain, Barbara Bollen, Valentin Bettegger, Andreas Samann	Automated Validation and Verification in Aircraft Design: Integrating IMV and MDO Simone Mancini, Tim Knapoth, Jean-Christophe Grotz, Jyvan Bécher, Joaquin Garcia Ordóñez, Maria Rosaria Rut, Jasper Bussemaker	Residual stresses evaluation in cold spray process using digital image correlation Abdusameem M., Stamoulis K.	Efficient Preliminary Design and Analytical Pre-Dimensioning of Design-Space-Adapted Hydrogen Pressure Tanks for Future Post-Free Aviation of the Example of a Cassini T20 Sebastian Splitzer, Edwin Zimmermann, Alexander Koepf, Chris Richter, Johannes Markmiller, Mark Güde	Surrogate-accelerated co-design of wing and active flutter controller under CS-25 and uncertainty Carlos Sosa Henriquez, Joseph Morlier, Sigitas Kilevicius
11:40 - 12:00	Evaporative Cooling with Fogging for Thermal Management of Hydrogen-Electric Aircraft Propulsion Bernhard Geil, Matthias Ronovsky-Bodisch, Niccolò Ferrari, Martin Beners	Implementation of a Higher Fidelity electrical propulsion chain in the frame of a hybrid regional aircraft multidisciplinary design analysis Léo Zonard, Didier Broust, Mathieu, Nathalie Barthel, Emmanuel Bernard, Valérie Pommerehne, Sébastien Defoor, Alessandro Squigilia	Development and Assessment of Thermal Management System for Hybrid-Electric Propulsion Applications within the ETRANI Project Kamran Reddy Konda, Aklion Mathakrishnan, Dikshant Sharma, George LB, Vignini, Majid Asli, Klaus Röschner	Modeling and Optimization of Aircraft Wing Dispensing Unit Fleets Sunny Ben-Elmehri, Christophe Com, Stéphane Aubert, Germain Hurtado	Investigation report on SAF application strategies of major European aircraft manufacturers Eulalia Tomas Nadal, Xavier Cubas, Gustavo Alvario	Open Digital Environment Integrating Systems into Preliminary Aircraft Mission Simulation and Optimization Reinhold Mader, Klaus Ziegler, Robert Marschner, Ögmençdir Pehlerson, Roland Wächter	Effect of Printing Parameters on the Electrical Resistance of 3D-Printed Piezoresistive Sensors Based on P3/CNT/C3 Composite Filament Romanos Vikas, Mariela Arsan Eldemir, Merve Karabul, Alpalekin Yıldız	Model based approach to optimize air stoichiometry and operating pressure for a PEM fuel cell based propulsion system of a four-seater aircraft Micael Arkkaya, Dieter Petrich	Preliminary Sizing of Multibody Platforms for Optimal Mission Planning Giulia Arandini, Emanuele L. de Angelis, Daniele Portone, Fabrizio Giulietti
12:00 - 12:20	Refining Fan Design for Heat Exchanger Integration: Challenges and Lessons Learned Marek Kozłowski, Rainer Schnell	Design, performance and modelling of an electrical system for a hybrid GT-CC propulsion system for commercial aircraft Cahong Wu, Evangelos Panitika, Panagiotis Laskaridis	Influence of Ram Air Channel Cooling Capability and Associated Drag on Fuel Cell Operation and Aircraft Mission Performance Silvan Kehn, Raphael Gebhart	LH2 supply-cell uncertainty for H2-powered aviation: European airport case studies (GCUAT Project) Time Schein, Finn Schenke, Achil Benamoun, Richard Hildebrandt	Digital Twin-Based Geometric Optimization of Gas Turbine Compressor for Sustainable Aviation Fuels Doğa Kılıç, Melih Yildiz	Evaluation of Flight Systems by Interfacing IMV based Co-Simulations with the Aircraft & System Design through SSP & Emulation A. Schindler, J. Japan, R. Moll	Validation of the MOVAX Industrial Concept and FSW Technology Solution for Fast-Change Longitudinal Joints: Results from IMV-Halo Marco Pecchione	Investigation of CO2-neutral propulsion concept in the preliminary design for a general aviation aircraft Johanne Houg, Annika Stast, Andreas Bardenhagen	A data model centered MDO discipline integration in GEMSO applied to industrial conceptual aircraft design François Gallard, Fabien Clabonno, Gilbert Rut Jimeza, Antoine Dechaume, Julian Barthel, Antoine DeBois
12:20 - 12:40	Integration of Compact Plate-Fin Heat Exchanger in a Ducted Fan Propulsion System for Hydrogen-Electric Aircraft Niccolò Ferrari, Matthias Ronovsky-Bodisch, Bernhard Geil, Martin Beners	Modelling and Optimization of a UAV Parallel Hybrid Electric Propulsion System Rita Soares de Pinho, João Fernandes, Vasco Coelho	HyPhode: Modelling and Simulation of a Two-Phase Mechanically Pumped Loop for Fuel Cell Waste Heat Recovery Sam W. Deckers, Arne K. Le Hénaff, Johannes van Es	Uncertainty-Aware Cryogenic Hydrogen Tank Design Optimization for Regional Turboprop Aircraft (DEMOSQAS Project) Georgios I. Arvelis, Konstantinos Bolas, Vasilis G. Gloukatzanis, Francesco Montomali, Anestis I. Kalfas	Integration of a multi-stack fuel cell system controller based on an aviation-relevant real-time operation system Alton Leiser, Cornelia Birsich	Virtual and Connected Testing of Hybrid Electric Networks Christian Schyr, Franz Dirwilly	Roughness-Aware Experimental Validation of an Additively Manufactured Multi-Stage Passive Pressure Reducer for Liquid Hydrogen Propulsion Systems Matteo D.L. Della Vedova, Paolo Magagnoli	Sensitivity of a fuel-cell battery hybrid energy system to commuter aircraft mission profile parameters Pascal Albrecht, Lukas Schröder, Dominik Mutschkenhofer	Hybrid physics-based and operations-aware ML surrogate for spacecraft life support systems Christian Mayer, Leonard Brandstetter, Chaya Chittoff
12:40 - 13:00	Recirculation-Assisted Surface Engineering of Complex AM Heat Exchangers in Aerospace Applications M. Belén García-Blanco, Virginia Jabe de Villos, Ochoa Ortiz, Amey Garcia-Castro, Asier Salicio	Operational Readiness Of Short Range Hybrid Electric Aircraft Under Energy, Charging And Thermal Recovery Constraints Dnyo Manivanan	Development of PIM Concept for HEA Thermal Management System David Fuentes Aguilar, Rabih Had	An Experimental Two-Dimensional Tank Study of Sloshing Dynamics (NASTA Project) Italo Pagliaro	Weight Reduction in Aviation Battery Systems Through Uncertainty-Aware Modeling Within Specified Safety Levels Jenny Matzko, Martin Wenger, Matthias Heusermann, Simon Holt, Javier Marco-Gimeno, Ramon Eberle, Vincent Lorenz	Model-Based Systems Engineering for Early Zonal Hazard Identification in Aircraft System Design Ayush Kamboj, Yicheng Sun	Open Discussion		

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Final Agenda
DAY 4 | 30.10.2026

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

Final Agenda

Poster Session							
Poster Tours: October 27th (Day 1), 16:30-17:30 & October 29th (Day 3), 16:00-17:00							
Poster ID 40 Multi-Fidelity Design and Aero-Thermal Integration of a High-Performance Heat Exchanger for Fuel Cell Aircraft Hani Douza, Schenck Ojo, Gregorio Kowczak, Changmin Cao, El Hassan Ridouane	Poster ID 41 A Multimodal Graph Framework for Air-Rail Connectivity Analysis and Disruption Simulation Eliot Concho, Paul Hernandez, Petar Mirazovic, Imani Stroumpou, Josep Lluis Llambo Pey	Poster ID 47 Synergistic Design of a Strut-Braced Wing Aircraft with Natural Laminar Flow for Energy-Optimal Long-Range Operations Felix Brenner, Ellen Künster, Andreas Strohmayr	Poster ID 58 Control of a Friction Welding Device mountable on CNC Lathes Serafin Nícolellis, George-Christophe Vaniakos, Evangelos Tsimas	Poster ID 73 Environmental Durability of Fiber-Reinforced Polymer Composites for UAV Structures under Thermal, Humidity, and Salt-Spray Exposure: An Integrated Computational-Experimental Framework Hafide Girard, Jude Kariyagala, Abdullah Durman, Bill Orde	Poster ID 82 Dynamic Simulation of Spin-Wheel Cold Air Inlet for Aircraft Thermal Management Chandra Shekhar Sharma, Chennu Rangarajulu	Poster ID 89 UWC sensor for UAVs designed for operating in icing conditions Damian Użewski, Jakub Baryla	Poster ID 124 Simulation-Based Design of a Fuel Cell Electric Powertrain for a P-Passenger Aircraft Rafael Pisker, Martin Aggarwal, Patrick Perri, Alexander Isenhardt
Poster ID 143 A Dual-Model Machine Learning and Spatiotemporal Knowledge Graph Framework for Flight Disruption Prediction and Cascade Analysis Hao Chen, Zhijian Zhou, Boli Concho, Paul Hernandez, Josep Lluis Llambo Pey	Poster ID 154 Liquid Hydrogen Supply for the BAUS Test Environment Felix Rebell, Jörg Weiss, Cornelia Böhrsch	Poster ID 162 Flying Under Different Rules: Low-Cost Carrier Responses to National Aviation Tax Regimes in Europe Michał J. Wichrowski, Viktor Trauberg	Poster ID 182 Enhancing Reliability Analysis to Improve Maintenance Decisions Alejandro Muriel-Mendoza, Sietse Dijkstra, Daniel Friesen, Konstantinos Stamoulis	Poster ID 201 Variable Rotor Speed Transmission Architecture for Energy-Efficient Operation Across Multiple Flight Conditions in High-Speed Vertical Lift Aircraft Helmut Mad, Jonas Koch	Poster ID 216 From Airspace Efficiency to Acceptance: Towards a Social Impact IFA for 5-space Anthoula Giannivalli, Anna Patalogaki, Eleftheria Georganti, Kyriaki Daskaloudi, Eva Patalogaki	Poster ID 241 A Multi-Stage Gearbox for Plug-In Hybrid Aircraft Propulsion with Unmatched Turbine Airflow Patrick Loggner, Gernot Burghard, Hedrij-Peyfuss, Helmut Mad	Poster ID 257 A Methodical Simulation of Cost-Constrained Decarbonization Pathways for the Air Transport System Jin Ji, Nicolas Pfeleth, Paul Rochet
Poster ID 271 Optimized Cockpit structure manufactured via explosive forming J. Seguy, C. Guichereau, D. Chatterier	Poster ID 313 A Cross-Domain Approach to Space System Requirements Engineering: Integrating TC33 with Selected AIR754 Practices Iwona Szpakowska-Peas, Michał Piwożarczyk, Bartosz Kosiński	Poster ID 335 Evaluation of bending ductility and fracture surface analysis in two additively manufactured complex cellular structures made of aluminum alloy Monkova K.	Poster ID 337 Experimental Analysis of GH2 Dispersion in Aircraft Cabin Jonas Meinel, Anne Wendt, Tharsten Schlipfshaus	Poster ID 340 AI Use Case Profiling, Clustering, and System Decomposition for Compliance-Oriented ATML Applications Imrit Shmoumou, Josep Lluis Llambo Pey	Poster ID 390 Pycnometer-Based Assessment of 3D Volumetric Measurements System for Nanoparticle Details Characterization Martin Spel, Christine Espinosa, Remy Chieragatti, Djamel Benral	Poster ID 396 Adaptive BAAN Based Optimization of Regional CubeSat Constellations Using a Time Regulated Revisit Metric Ebu Bekir Ciftci, Haili Ermi Soken	Poster ID 415 Thermo-Structural Modeling of H2 Tanks for Aircraft Design Vishwanath Nagaraj, Francesco Greflice, Rosalva Vaz
Poster ID 426 Bio-Inspired Wing Optimisation for Efficiency and Lateral-Directional Stability of a Vertical-Takeoff Heavy Autonomous Gilder Francesca Barone, Erwin R. Gouwree, Paraskevas Kolandros, Mabelle Le Méhès Rego, Preeto D. Macedo Alfaro, Tancréd M. Siagusa, Riki Toubkin	Poster ID 428 Bio-morphing Deployable Tail Plane Options for Longitudinal, Lateral and Directional Control of Compact Storage Autonomous Heavy Gilder Francesca Barone, Erwin R. Gouwree, Paraskevas Kolandros, Mabelle Le Méhès Rego, Preeto D. Macedo Alfaro, Tancréd M. Siagusa, Riki Toubkin	Poster ID 439 Assessment of Structural Requirements for Building a Lunar Habitat Ankitha Kamath, Basim Uwais, Univ.-Prof. Dr.-Ing. Kai-Uwe Schröder, Dr. Prashant GK	Poster ID 452 Ice deflection and automatic activation of a resonant electro-mechanical de-icing system using piezoelectric impedance and machine learning Rémi Meynad, Marc-Bastien, Valérie Pommier-Budinger, Aurélien Reyssel	Poster ID 455 Multidisciplinary Integration of High-Fidelity Models in the Preliminary Design of a Box-Wing DEP Aircraft Sara Hiral, Andreas Strohmayr	Poster ID 466 Aerothermodynamic Shape and Material Assessment for Environmentally Sustainable CubeSat Re-entry Ankitha Kamath, Gayatri B. Preetha	Poster ID 481 POE-Encapsulated IBC Solar Cells on Pre-Cured CFRP: Adapting Lightweight PV Laminates Manufacturing for Stratospheric HALE UAV Applications Christian Hammerly	Poster ID 486 The Harvard-Autonomous Architecture: Decoupling Safety from Intelligence in AI-driven Flight Miguel Martín Acosta, Luis Santiago Gamito Bulón
Poster ID 488 From Green Deal to Green Hydrogen: Mapping Energy Transition Research in European Union Countries Emu Ullman, Meethi Wida	Poster ID 490 Novel Hybrid Approach of Metal Leading Edge Manufacturing Combining Forging and Laser Powder Directed Energy Deposition Wellong Wang, Robert Lau	Poster ID 496 A Method to Estimate Man Hours from Aircraft Maintenance Manuals Manasa Kulkarni, Jeevitha Adetomiwa, Ayodeji Akintola, Marc Lauerer	Poster ID 498 Coupling Cabin Layout and Fleet Transition: Interactive Analysis of Network-Level Fuel-to-PAX Ratio Markus Rothkötter, Thomas Feuerle, Peter Hecker	Poster ID 506 Shortest route method adaptation for a planetary rover motion with slope limitation based on Mars Express topographic data Aleksandra Kuzenova, Vladislav Vojtejev, Anna Ushakovskaya, Sergei Bratschkus	Poster ID 546 Analysis of the Stiffness and Dynamic Properties of the Wings of Dynamically Scaled Models and a Reference Aircraft Milczarekcy Jaroslaw, Rogalski Robert, Olejka Aleksander	Poster ID 546 Turbo-engine tests with various SAF: Impact on non-volatile Particulate Matter (nvPM) characteristics Jean-Louis Champion-Reaou, Philippe Boyer, Laurence Lombard, Ana Maria Ceranachi Pereira, Christophe Doucet, Alain El Khoury, Guillaume Bidon, Nicolas Jeunand	Poster ID 596 Lifellthral project: a Design-Build-Fly for Education and Applied Research Emmanuel Béland, Pierre-Alexis Vivas, Antoine Lanthony, Yannick Parnier, Naoussine Guemast, Rémi Azouli, David Rodriguez Velasco, Jean-Baptiste Dourmy, Maxime Liège, Maxime Toli, Clément Filler, Diego Martinez-Gonzalez, Soane Soane, Kamika Salekha, Solome Marques Pereira, Alexandra Nieto-Castillo, Hee Yul Wang, Hana Hana-Shahar, Praseeth Sharma, Sébastien Lericux, Nabila Lawaili-Ali-Gada
Poster ID 604 A Hybrid 1-D/3-D Framework for the Design and Optimization of Burn-Air-Ducted Thermal Management Systems in Electric Aircraft Prasanna Muthukumar	Poster ID 608 Emotional State Assessment and Behavioral Response Analysis in Survivability-Critical Fighter Aircraft Scenarios Ioanna K. Lekakou, Dimitrios G. Stamatiou, F. Vekrellas, N. Tsamirakopoulos, G. Ntakis, L. Symeonidis, E. Spyriou, K. Toulou, V. Kappas	Poster ID 614 A Parametric Reduced-Order Model for Rapid Flight Envelope Loads Prediction of a Flexible Aircraft Elias Allegaert	Poster ID 617 Comparison of aluminum and POM projectile hypervelocity impact on Whipple Shield target Abdulkamil K. Akproue J., Desconnes J.	Poster ID 618 Numerical assessment and validation of URANS predictions of shock-induced separation in an overexpanded thrust-optimized parabolic nozzle Adán Emiliano González Hernández	Poster ID 619 Aerodynamic Fan Design and Trade-Offs for Propulsion Systems with Integrated Heat Exchangers Eleni Panteromaki, Manolis Karavass, Rene Schreier		