

Time	Room	ALPHA	FOOTHOFF	BRAYO	IKAR	ALFA	CHARIEE	BETA		
8:30 - 18:30		Registration								
9:00 - 9:30	Room: ALFA	KeyNote Speech by Dr Bruno Strohriegl , "Challenges of business jets technological developments" KeyNote Speech by Dr Bruno Strohriegl , "Key-Research Scientific, Strategic, R&D and Advanced Projects, Dassault Aviation" "Accelerating market introduction of emerging innovations through integrated technology demonstrations" KeyNote Speech by Dr Fey Callier , "Associate Director for Flight Strategy, Integrated Aviation Systems Program, NASA Langley Research Center"								
9:30 - 10:00		Coffee Break								
10:00 - 10:20	Session	2.1	4.2	1.2	10.1	11.2	8.1	5.2		
10:20 - 10:40	Session Title	Design Challenges for Future Passenger Aircraft	Folgage of Aircraft Structures	Non-Destructive Testing in Aerospace	Space Physics	Optimization, Control and Robot Design in Aerodynamics	MINI WORKSHOP Future Challenges of Unmanned Aerial Systems Coordinated by Prof Fabio Quagliotti, Politecnico di Torino	Characterization & Modeling of Nanofilled Polymers & Composites		
10:40 - 11:00	Session Chair(s)	Dr Markus Fisher Airbus Operations	Dr Antoni Napiokowiczki Institute of Aviation	Prof Wieslaw Orlowiczka Polish Academy of Sciences	Prof Romano Rukiewicz Institute of Aviation	Prof Jacek Rakoci Warsaw University of Technology	Prof Giulio Avinola Università del Piemonte	Prof Konstantinos Tsarpas University of Patras		
11:00 - 11:20	10:00 - 10:20	Aerospace Engineering: Emerging Innovations in the design tools for Aerospace [33] Jorge Barrios Hernandez	Application of Computed Tomography to Measurement of River Hole Exposure [34] Wojciech Wozniak, Mateusz Bielecki	Active thermography method for observation and evaluation of an internal composite structure with discontinuities [105] Katarzyna Aleksandra Hryciuk-Masalska, Wieslaw Orlowiczka	The heliosphere seen as an airplane with self-organizing wings [305] Tomasz Płocinski	Influence of the wall distance on the heat transfer distribution of the flow over velocity [34] Marcin Kozłowski, Krzysztof Szumiec, Paweł Rępański, Janusz Niegierski, Fernando Torres	Risk assessment of UAV/UAV mission planning [34] Giulio Avinola, David M. Matthew Henderson	Non-Embedded Polymer Combining Carbon Nanotubes as a Innovative Aerocoatings [47] Wojciech Wozniak, Mateusz Bielecki, Konstantinos Tsarpas		
11:20 - 11:40	10:20 - 10:40	A reduced order model to estimating propeller wing interaction in rotor powered aircraft preliminary design [40] Alessandro Scattolon, Enrico Cestari, Giulio Pavesi	The process of AISC composite deformation of a scale of gains investigated with diaphragm methods [84] Eliberto Gasbarrini, Antonio Rocamora, Massimo Wilson, Sebastiano Mariani, Christian Schickel	The spactrometry method for observation and evaluation of an internal composite structure with discontinuities [11] Magdalena Malinowska, Katarzyna Aleksandra Hryciuk-Masalska, Wieslaw Orlowiczka	The heliosphere: models and observations [4] Romano Rukiewicz, Wojciech Korzec, Jan Kotarz	Randomized Methods for Real Time Adaptation in presence of uncertainties [14] Ryszard Chlebicki, Tomasz Górecki	Investigation Of The 3WB Concept For Fixed-Wing UAV Applications [47] Paweł Panigajski, Stefano Paschalis, Agathe Charnel, Elia Koutsoukis, Sanaa Parkash, Carlos Chuaqui	Mechanical and rheological properties of nanofilled polymers [47] Konstantinos Tsarpas, Agathe Charnel, Elia Koutsoukis, Sanaa Parkash, Carlos Chuaqui		
11:40 - 12:00	10:40 - 11:00	Studies on Cellular-based additive manufacturing process as enabler of specific stiffness requirements [81] Miguel Ángel Aciano	Folgage Test of MS-2 Vertical Fiber Composite Patch Repairs [34] Andrzej Lesni, Piotr Czerwinski, Wojciech Zupinski, Michał Szustowski, Marcin Kuzubski, Piotr Rymer, Roman Baranowski, Krzysztof Dziugaj, Michał Dziurba-Borucki	Basic wave propagation models for 3WB - Interface Elements [19] Piotr Fiborek, Paweł Kozłowski, Maciej Radziński, Michał Dziurba-Borucki	Interstellar medium modelling in the low density regime [305] Jan Paweł Kotarz, Romano Rukiewicz, Wojciech Korzec	Dynamic stability analysis of the light gyration [37] Tomasz Górecki/Orłowski, Marcin Figut	Self-Localization Of A UAVs in Remotely Deployed Radio Localization System [48] Stanisław Krawiec, Paweł Górecki	Numerical simulation of crack growth and stopping in highly loaded single lap shear composite bonded joints [44] Konstantinos Tsarpas, Sanaa Parkash		
12:00 - 12:20	11:00 - 11:20	Transport aircraft configuration design perspectives - building an advanced technology design [107] Daniel Reichert	Ornamental Loads Modeling Program for Polish Bo-206 Aircraft [35] Andrzej Lesni, Andrzej Kurylo, Wojciech Zupinski, Adam Kucharski, Piotr Rymer, Michał Dziurba-Borucki, Krzysztof Dziugaj	Potential of Lamb waves for locating for damage detection in aerospace structures [307] Paweł Kozłowski, Wojciech Korzec, Wieslaw Orlowiczka, Dariusz Yang	Neutral Component of the Local Interstellar Medium [9] Wojciech Korzec, Romano Rukiewicz	Analysis and optimization of mapping wing/body aircraft configurations [147] Witold Kłomczyński, Zdzisław Górecki	Portable indoor-outdoor UAV positioning system [48] Jakub Chlebicki, Zdzisław Górecki	The ICCOMASS project Introduction and status after 18 months Konstantinos Tsarpas		
12:20 - 12:40	Session	2.1	10.2	2.2	1.1	11.2	3.2	1.2, 1.1		
12:40 - 13:00	Session Title	Design Challenges for Future Passenger Aircraft	Tele-detection in Space	Right Control	MINI WORKSHOP Future Challenges of Unmanned Aerial Systems Coordinated by Prof Fabio Quagliotti, Politecnico di Torino	Optimization, Control and Robot Design in Aerodynamics	Small Aircraft Multidisciplinary Optimization 1	Non-Destructive Testing in Aerospace		
13:00 - 13:20	Session Chair(s)	Dr Markus Fisher Airbus Operations	Dr Mariusz Kowalczak Institute of Aviation	Prof Tomasz Rogalski Rzeszów University of Technology	Prof Giulio Avinola Università del Piemonte	Prof Jacek Rakoci Warsaw University of Technology	Dr Andrzej Jankowiak Institute of Aviation	Prof Wieslaw Orlowiczka Polish Academy of Sciences Dr Wieslaw Jankowiak Politechnika Białost		
13:20 - 13:40	11:20 - 11:40	On the Way to the Commercial Aircraft 3. Large Deck, recent results by Capco Sky 3. Next Passenger Aircraft Architecture [114] Markus Fischer	Tele-detection in Space [274] Mateusz Barabasz	Agent-based flight control and monitoring system [28] Jacek Pankowski	Approach to a Synthesis of Hybrid Unmanned Aircraft Systems (HAS) in stochastic configurations [73] Julia Malinowska, Tobiasz Kurt Dürren	Aerodynamic analysis of propeller wing on the aircraft stability in the tandem wing configuration [37] Marcin Figut	A Systematic Approach to Small Aircraft Design Optimization [205] Andrzej Nowak	Influence of adhesive bonding state on the mechanical properties of composite bonded joints [345] Paweł Nowak, Mateusz Bielecki, Konstantinos Tsarpas, Elia Koutsoukis, Wieslaw Orlowiczka		
13:40 - 14:00	11:40 - 12:00	Concept design methodology of a box-wing aircraft in a novel commercial sector [311] Paweł Kozłowski, Chiranjeev Padhyashankar, Ananya Tattar	Key events for Space Teledetection, short study of Space Teledetection [207] Marcin Kozłowski	Aircraft Autonomic Value Spin Recovery System [42] Piotr Szustowski, Tomasz Rogalski	Application of Unmanned Aerial Vehicles (UAV) in Precision Agriculture [21] Robert Piel, Krzysztof Włodarczyk	Aerodynamic modeling process of aerobotic aircrafts: Review Engineering and Computational Fluid Dynamics [214] Aleksander Głuch, Sławomir Białobłocki, Adam Dulbini	Small aircraft control plan analysis reliability study [32] Paweł Jan Głowacki, Wojciech Bielecki	Comparative study of delamination of composite due to modulus using finite, electro-mechanical impedance and guided waves [110] Konstantinos Tsarpas, Paweł Kozłowski, Adam Dulbini		
14:00 - 14:20	12:00 - 12:20	Moving Away From Conventional Aircraft Design Architectures - What are the Challenges Ahead? [132] Rig Ningsan, Jonathan Cooper	Remote Sensing in the research of Mars and other extraterrestrial bodies [213] Rafał Piotr Jaworski	Concept of auto-tail deflected control system for the Bo-206 aircraft [111] Marcin Kozłowski, Cezary Kowalczak, Albert Jędrzejewski, Anna Maria Alami, Roman Domaradzki	Hybrid Energy System in Unmanned Aerial Vehicles [172] Anna Maria Alami, Roman Domaradzki	Experimental Study on Flow Separation and Aerodynamic Load Control using Synthetic Jet Actuators [244] Harry W.M. Hoelzer/Pratt, Daniel Kowalczyk, Tom Bink	An Advanced Thermal Awareness System for smart aircraft [140] Jan Banaś, Marcin Szustowski, Witold G. W. Płubiński, Marcin Kozłowski, Piotr Kozłowski	Experimental investigation of the effects of pre-bonded repair on composite structures and aging on the mechanical properties of composite bonded joints [345] Elia Koutsoukis, Konstantinos Tsarpas, Elia Koutsoukis, Mateusz Bielecki, Paweł Kozłowski		
14:20 - 14:40	12:20 - 12:40	Design for additively manufactured FT structural components [135] Mateusz Wozniak, Jakub Szewak, Jakub Jagiel	The application of traditional sensor embedding methods for extra-terrestrial environment studies [115] Sylwia Agnieszka Holcwicka	Stability of position tracking control in rigid systems of non-holonomic (NAV) [21] Cezary Kowalczak, Leszek Ambrosiak	A numerical study into the dynamic stability of a vehicle [232] Agnieszka Witek	A tactical separation system for small air transport vehicles [194] Witold G. W. Płubiński, Jakub Tarasik, Jan Banaś	12:30 - 12:40 Adhesive bonding of thermally conductive carbon reinforced composites with FRP matrix. [244] Tomasz Rogalski, Piotr Kozłowski, Piotr Głowacki, Marcin Kozłowski	12:30 - 12:40 Tactical Separation System for Small Air Transport Vehicles [194] Witold G. W. Płubiński, Jakub Tarasik, Jan Banaś		
14:40 - 15:00	12:40 - 13:00	Room: ALFA	Lunch Break							
15:00 - 15:30		KeyNote Speech by Dr Romeo Bossi , "Flying Around the World With Solar Power - A Success Story" KeyNote Speech by Dr Romeo Bossi , "1. Design, Advisory and Consultant for the Solar Project Solar Impulse"								
15:30 - 15:45		Coffee Break								
15:45 - 16:00	Session	2.1	12.8	2.2	11.1	11.2	2.4	5.6		
16:00 - 16:20	Session Title	Design Challenges for Future Passenger Aircraft	CAFFADOSSA Session	Right Control	Modelling and Simulation of Flight Physics - Part II	MINI WORKSHOP Future Challenges of Unmanned Aerial Systems Coordinated by Prof Fabio Quagliotti, Politecnico di Torino	Vibration Control	Important Risk Issues in Aviation		
16:20 - 16:40	Session Chair(s)	Dr Markus Fisher Airbus Operations	Mr Fabien Marly EBECIEN Inertis	Prof Tomasz Rogalski Rzeszów University of Technology	Prof Krzysztof Kozłowski University of Gdansk	Prof Fryderyk Szczępaniak Air Force Institute of Technology	Prof Zdzisław Krawiec Białystok University of Technology	Prof Gerald Gibson Newcastle University		
16:40 - 17:00	15:45 - 16:00	Integrated aerospace systems design course: an educational experience of Politecnico Di Torino [106] Roberto Fusaro, Marco Vio, Andrea Marini, Luca Ruggieri, Christian Penazzi	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 1	A vision-based method for supporting autonomous landing control [207] Marcin Kozłowski, Tomasz Rogalski, Dawid Marchalski, Marcin Wozniak, Tomasz Rogalski, Jacek Pankowski, Grzegorz Kozłowski, Piotr Czerwinski, Paweł Kozłowski	Finite control sets of evenly axisonic flow [173] BeataBielecka, Alicja Krawczyk, Renata Fijałk, Daria Ulanowicz	The impact of a growing number of small UAV operations on flight safety within the General Aviation [134] Piotr Masłowski, Jerry Griffin	Study of optimization algorithms for prognostics of electrohydraulic servomechanisms for servomechanisms [237] Marcin Kozłowski, Jacek Pankowski, Paweł Kozłowski, Marcin Borysiak	Flame and Fire Retardancy of Polymer Composites used in Aviation [207] Bernhard Schuster		
17:00 - 17:20	15:00 - 16:00	A support for the vehicle architecture definition of innovative hypersonic transportation systems during conceptual design [148] Roberto Fusaro, Niccolò Vio	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 2	Hardware in the loop tests of the switching controller [205] Leszek Ambrosiak, Cezary Kowalczak, Marcin Kozłowski, Eliberto Gasbarrini	Prediction of Fluid Phenomenon using an Efficient Inflow-Engine Wing Solver [111] Jarosław Dziubiński, Andrzej Duda, Michał Prochocinski, Andrzej Chwiłkowi	A Comprehensive Approach for the Safety Analysis of Remotely Piloted Aircraft Systems [202] Laura Novati, Alessandro, Giorgio Guglielmi, Fabio Quagliotti, Stefano Paschalis, Sandro Geracino	Influence of location of piezo-actuator hardware on design of active vibration control system with harvesting energy [78] Andrzej Piotr Kozłowski	Comprehensive modelling of structural laminates in fire [311] Paweł Kozłowski		
17:20 - 17:40	16:00 - 16:20	Preliminary flight mechanic analysis of a propulsive thrust system [145] Witold Głuch, Krzysztof Kozłowski, Filipa Barchi	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 3	The impact of parametric uncertainty of the model of aircraft on control laws for an automatic emergency response [11] Jerry Griffin, Piotr Masłowski	Prediction of air: trajectory time-unknown based on body, Meule G (simulation and test) [202] Aleksandra Rogocinska, Paweł Głowacki, Grzegorz Kompaniarz, Piotr Aniolko, Vito, Paolo Gonzalez, Marcin Piel, Leszek Ambrosiak	Concept of the Elastic Launcher for Medium Class of Unmanned Aerial Vehicles [213] Marcin Kozłowski, Paweł Kozłowski, Zdzisław Górecki	Prognosis: New Method based on Discrete Wavelet Transform Applied to Onboard Biomechanical Actuator [245] Marcin Kozłowski, Dariusz Dziugaj, Wojciech Paschalis, Paweł Kozłowski	Intersected case on composite: how to produce it? [32] Serge Boudaert, Sophie Descombes		
17:40 - 18:00	16:20 - 16:40	Agile and Quick-Weight Concept Selection [374] Sławomir Marquardt	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 4	Simulation of High-Reynolds number 3D complex flow [283] Jerzy Masłowski, Piotr Szustowski	Probability of detection in IR Thermography evaluation of Unmanned Aerial Vehicles [234] Marcin Kozłowski, Paweł Kozłowski	Probabilistic design of the UAV vertical take-off and landing [101] Marcin Chodkowski, Michał Mazur, Mirosław Nowakowski, Grzegorz Kompaniarz	Hybrid experimental-numerical analysis of mechanical and thermal impact on composite structures [202] Konstantinos Tsarpas, Zdzisław Górecki, Agnieszka Witek, Agathe Charnel	Failure Of CFRP Structures Under Compressive Load [14] Arthur G. Gibson		
18:00 - 18:20	16:40 - 17:00	Design and Sizing of a demonstrable box wing for a general aviation [102] Andrius Aranas, Steffen, Leon Eric, Draxler, Jean-Claude, Remy, Olivier, Serge Anouze	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 5	Companion of UAV model of real works operation and experimental tests on flight control architecture [202] Tomasz Rogalski, Paweł Kozłowski	Drag reduction via turbulent boundary layer flow control [202] Andrius Aranas, Sergio Calderin, Pinar Erdemir, Fu Song, Pengcheng Jiang, Pengfei Jiang, Yuhua Kang, Yuhua Kang, Zheng Tang	Multiflow UAV sensor fusion for precision landing [102] Marcin Figut	ICONE: Improving the crack-toughness of composite transportation structures [2020 - MSCA 118 - 2014 [31] Brian G. Pridmore	Dynamic and Aerostatic Analysis of A Ringless Helicopter Blade with an Active Control Tailoring Edge for Forward Flight [47] Paweł Kozłowski, Michał Chybański, Marcin Szustowski, Paweł Kozłowski		
18:20 - 18:40	17:00 - 17:20	Wing design guidelines for innovative hypersonic transportation systems [147] Roberto Fusaro, Niccolò Vio	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 6	Forming a hollow optical fiber properties [242] Josef Głowacki	Introduction of the body number in modeling turbulent premixed flames [202] Natche Ahmed, Todd Shrivastha	Design and analysis of feedback loop to regulate the basic parameters of the unmanned aircraft [302] Marcin Chodkowski, Karolina Baran, Mirosław Nowakowski, Grzegorz Kompaniarz	Hybrid experimental-numerical analysis of mechanical and thermal impact on composite structures [202] Konstantinos Tsarpas, Zdzisław Górecki, Agnieszka Witek, Agathe Charnel	Fiber braiding process applications for structural health monitoring [37] Carlos Roldán, Javier Beldarrain, Fernando Ramos, Muelo Jahn		
18:40 - 19:00	17:20 - 17:40	Conceptual design of a hypersonic airframe vehicle transportation system [136] Roberto Fusaro, Dorella De Nicola, Micaela Donzile, Renato	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 7	Optimal Design of Control of Flapping Wing using Adaptive Lateral Control [236] Marcin Kozłowski, Wojciech Głuch, Leszek Ambrosiak, Piotr Kozłowski, Zdzisław Górecki	Flow plane aerodynamic analysis using Computational Fluid Dynamics methods [207] Aleksandra Rogocinska, Paweł Głowacki, Adam Dulbini	Unmanned aerial vehicles: Innovations and opportunities [304] Andrzej Jankowiak	Experimental validation of simulations of hot air flow events on composite wing panels [202] George H. Compton	Design and analysis of a mechanism for the chord and corner leveling of an aircraft wing [102] Florian Weber, Janusz, Yuhua Kang		
19:00 - 19:20	17:40 - 18:00	Aircraft Loads Prediction using Enhanced Simulation [153] Jonathan Cooper, Jim Gifford, Dorian Jones, Mark C. Leventon, Paul Star, Peter Lamont	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 8	Fast Optimization Using the Adjoint Method [283] Arseny Bogdanov, Zdzisław Górecki	Drag reduction via turbulent boundary layer flow control [202] Andrius Aranas, Sergio Calderin, Pinar Erdemir, Fu Song, Pengcheng Jiang, Pengfei Jiang, Yuhua Kang, Yuhua Kang, Zheng Tang	Multiflow UAV sensor fusion for precision landing [102] Marcin Figut	ICONE: Improving the crack-toughness of composite transportation structures [2020 - MSCA 118 - 2014 [31] Brian G. Pridmore	Dynamic and Aerostatic Analysis of A Ringless Helicopter Blade with an Active Control Tailoring Edge for Forward Flight [47] Paweł Kozłowski, Michał Chybański, Marcin Szustowski, Paweł Kozłowski		
19:20 - 19:40	18:00 - 18:20	CEINTHEUS Overview Presentation Anna Jara	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aerodynamics - 9	Fast Optimization Using the Adjoint Method [283] Arseny Bogdanov, Zdzisław Górecki	Drag reduction via turbulent boundary layer flow control [202] Andrius Aranas, Sergio Calderin, Pinar Erdemir, Fu Song, Pengcheng Jiang, Pengfei Jiang, Yuhua Kang, Yuhua Kang, Zheng Tang	Multiflow UAV sensor fusion for precision landing [102] Marcin Figut	ICONE: Improving the crack-toughness of composite transportation structures [2020 - MSCA 118 - 2014 [31] Brian G. Pridmore	Dynamic and Aerostatic Analysis of A Ringless Helicopter Blade with an Active Control Tailoring Edge for Forward Flight [47] Paweł Kozłowski, Michał Chybański, Marcin Szustowski, Paweł Kozłowski		
19:40 - 20:00	18:20 - 18:40	Room: FAFA	GA EASN Association							