

Time	Room	ALPHA	FOOTHOOT	BRAYO	KEAR	ALFA	CHARLIE	BETA	
8:30 - 18:30		Registration							
9:00 - 9:30	Room: ALPHA	KeyNote Speech by Dr Bruno Stalder , "Challenges of business jets technological developments" Keynote Speech by Dr Bruno Stalder , "Keynote: Scientific, Strategic, R&D and Advanced Projects, Dassault Aviation" "Accelerating market introduction of emerging innovations through integrated technology demonstrations" Keynote Speech by Dr Fay Callier , Associate Director for Flight Strategy, Integrated Aviation Systems Program, NASA Langley Research Center							
9:30 - 10:00		Coffee Break							
10:00 - 10:30	Session	2.1	4.2	1.2	10.1	11.2	8.1	5.2	
10:00 - 10:30	Session Title	Design Challenges for Future Passenger Aircraft	Follage 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	
10:00 - 10:30	Session Chair(s)	Dr Markus Fisher Airbus Operations	Dr Antoni Napiórkowski Institute of Aviation	Prof Wiesław Ochojczyński Polish Academy of Sciences	Prof Romano Rukiewicz Institute of Aviation	Prof Jacek Rakociński Warsaw University of Technology	Prof Giulio Avinola Università del Piemonte Orientale	Prof Konstantinos Tsarpas University of Patras	
10:00 - 10:20	10:00 - 10:20	Aerospace Engineering: Emerging Innovations in the design tools for Aerospace [33] Jorge Barajas Hernandez	Application of Computed Tomography to Measurement of River Hole Expansion [34] Wojciech Węgrzyn, Mateusz Bielecki	Active thermography method for observation and evaluation of an internal composite structure with discontinuities [105] Katarzyna Aleksandra Wojciechowska, Wiesław Ochojczyński	The heliosphere seen as an airplane with self-organizing wings [305] Tomasz Płatek	Influence of the wall distance on the heat transfer distribution of the flow over cavity [34] Marcin Kozłowski, Krzysztof Szumowski, Paweł Rępański, Janusz Niegowski, Fernando Torres	Risk assessment of UAV/UAV mission planning [34] Giulio Avinola, David M. Martinez Hernandez	Non-Embedded Polymer Combining Carbon Nanotubes as a Innovative Aerocoatings [47] Daria Kozłowska, Paweł Rępański, Marcin Kozłowski, Anna Białowska	
10:20 - 10:40	10:20 - 10:40	A reduced order model to estimate proper wing interaction in solar powered aircraft preliminary design [40] Alessandro Scattolon, Enrico Cestari, Giulio Pavesi	The process of AISC composite deformation of a scale of girth investigated with diaphragm methods [84] Edoardo Gabbianola, Antonio Rocamora, Massimo Velasco, Sebastian Wosinski, Christian Schöckel	The spectroscopy method for observation and evaluation of an internal composite structure with discontinuities [11] Magdalena Malinowska, Katarzyna Aleksandra Wojciechowska	The heliosphere: models and observations [4] Romana Rukiewicz, Wojciech Korzec, Jan Kotarski	Randomized Methods for Real Time Adaptation in presence of uncertainties [14] Bartłomiej Kozłowski, Tomasz Płatek	Investigation Of The 3WB Concept For Fixed-Wing UAV Applications [34] Paweł Rępański, Stefano Rocaschini, Marcin Kozłowski, Paweł Rępański, Anna Białowska, Enrico Cestari, Daria Kozłowska	Mechanical and rheological properties of carbon nanotubes/polymer composites [108] Konstantinos Tsarpas, Agathe Chantal, Daria Kozłowska, Daria Kozłowska, Daria Kozłowska, Daria Kozłowska	
10:40 - 11:00	10:40 - 11:00	Studies on Cellular-based additive manufacturing process as enabler of space efficient equipment [81] Miguel Ángel Acosta	Follage Test of 60%-21 Vertical Force Composite Patch Panels [34] Andrzej Łęski, Piotr Czerwinski, Wojciech Żukowski, Michał Szustowski, Marcin Kozłowski, Piotr Rymer, Roman Baranowski, Krzysztof Szumowski, Michał Dąbrowski	Basic wave propagation models for 3Dw - Interface Elements [19] Piotr Fiborek, Paweł Kozłowski, Maciej Radziński, Michał Dąbrowski	Internaler medium modeling in the bow shock region [305] Jan Paweł Kotarski, Romana Rukiewicz, Wojciech Korzec	Dynamic stability analysis of the light gyration [37] Tomasz Gębarowski, Grzegorz Marcin Figut	Self-Localization Of A UAVs in Remotely Deployed Radio Localization System [34] Stanisław Kozłowski, Enrico Cestari	Numerical simulation of cross growth and stopping in highly loaded single lap shear composites bonded joints [44] Konstantinos Tsarpas, Konstantinos Tsarpas	
11:00 - 11:20	11:00 - 11:20	Transport aircraft configuration design perspectives - building an advanced technology aircraft [107] Daniel Reckbach	Ornitho-Like Modeling Program for Polish Bio-Inspired Aircraft [34] Andrzej Łęski, Andrzej Kuryłko, Wojciech Żukowski, Marcin Kozłowski, Piotr Rymer, Michał Dąbrowski, Krzysztof Szumowski	Potential of Lamb waves for locating for damage detection in aerospace structures [307] Paweł Kozłowski, Magdalena Malinowska, Wiesław Ochojczyński, Dariusz Janicki	Neutral Component of the Local Interstellar Medium [9] Wojciech Korzec, Romana Rukiewicz, Romana Rukiewicz	Analysis and optimization of mapping wing/body aerodynamic characteristics [44] Witold Kłomczyński, József György	Portable indoor-outdoor UAV positioning system [34] Jacek Chwałka, József György	The ICC-COMPASS project Introduction and status after 18 months Konstantinos Tsarpas	
11:20 - 11:40	Session	2.1	10.2	2.2	1.1	11.2	3.2	1.2, 1.1	
11:20 - 11:40	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	
11:20 - 11:40	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 Orientale	Prof Jacek Rakociński Warsaw University of Technology	Dr Andrzej Węwniak Institute of Aviation	Prof Wiesław Ochojczyński Polish Academy of Sciences Dr Wiesław Ochojczyński Rzeszów University of Technology	
11:20 - 11:40	11:20 - 11:40	On the Way to the Commercial Aircraft of the next Decade, recent results by Clean Sky 2, Large Passenger Aircraft Research [111] Markus Fisher	Tele-detection in Space [274] Mateusz Bielecki	Agent-based flight control and monitoring system [8] Jacek Pankowski	Approach to a Synthesis of Hybrid Unmanned Aircraft Systems (HAS) in a Robotic Configuration [75] Juliano Malhe Tobiasz Kurt Durheim	Aerodynamic analysis of propeller impact on the aircraft stability in the tandem wing configuration [37] Marcin Figut	A Systematic Approach to Small Aircraft Design Optimization [205] Andrzej Węwniak	Influence of adhesive bonding state on the mechanical properties of composite structures [148] Paweł Niewiadomski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	
11:40 - 12:00	11:40 - 12:00	Concept design methodology of a box-wing aircraft at a novel commercial aircraft [311] Paweł Kozłowski, Chaitanya Patil, Paweł Kozłowski, Paweł Kozłowski	Key events for Space Research, short story of Space Tele-detection [274] Mateusz Bielecki	Aircraft Automatic Value Spin Recovery System [42] Piotr Szustowski, Marcin Figut	Application of Unmanned Aerial Vehicles (UAV) in Precision Agriculture [74] Robert Piel, Krzysztof Włodarczyk	Aerodynamic modeling process of aerobotic aircrafts for Business Engineering and Computational Fluid Dynamics [214] Aleksander Głuch, Sławomir Kozłowski, Adam Dulabonka	Small aircraft control plan analysis reliability study [32] Paweł Jan Głowacki, Włodzisław Bielecki	Comparative study of delamination of composite due to modulus using finite, electro-mechanical impedance and guided waves [110] Konstantinos Tsarpas, Konstantinos Tsarpas, Konstantinos Tsarpas	
12:00 - 12:20	12:00 - 12:20	Moving Away From Conventional Aircraft Design Architectures - What are the Challenges Ahead? [132] Filip Niegowski, Andrzej Ciopek	Remote Sensing in the research of Mars and other extraterrestrial bodies [32] Rafał Fijałkowski	Automatic Flight Control System Using Aircraft Telematics Systems [83] Albert Zając, Marcin Kozłowski	Energy Efficient Systems in Unmanned Aerial Systems [172] Anna Maria Alami, Ramon Domercq	Experimental Study on Flow Separation and Aerodynamic Load Control using Synthetic Jet [244] Harry W.M. Hoelzer, Gertjan J. van den Brink	An Advanced Weather Awareness System for small aircraft [140] Jan Banaś, Marcin Kozłowski, Witold Kłomczyński, Paweł Rępański, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	Experimental investigation of the effects of pre-bonded repair on the mechanical properties and aging on the mechanical properties of composite bonded joints [345] Daria Kozłowska, Konstantinos Tsarpas, Daria Kozłowska, Konstantinos Tsarpas	
12:20 - 12:40	12:20 - 12:40	Design for additively manufactured FT structural components [139] Marcin Kozłowski, Jacek Szewski, Jacek Szewski	The application of traditional sensoring methods for extra-terrestrial environment sensing [115] Sylwia Agnieszka Holcwik	Concept of auto-tune developed control system for BVA-100 [341] Marcin Kozłowski, Cezary Kozłowski, Albert Zając	Stability of position tracking control in rigid structures of non-holonomic (NAV) [32] Cezary Kozłowski, Leszek Ambrosiak	A numerical study into the dynamic stability of a tailless aircraft [232] Agnieszka Węwniak	12:20 - 12:40 A cost optimization method for small air transport vehicles [14] Jan Banaś, Marcin Kozłowski, Witold Kłomczyński, Paweł Rępański, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	12:20 - 12:40 Adhesive bonding of fiber-reinforced carbon reinforced composites with FRP matrix [148] Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	
12:40 - 13:30	12:40 - 13:30	Lunch Break							
13:30 - 15:00	Room: ALFA	KeyNote Speech by Dr Thomas Börs , "Flying Around the World With Solar Power - A Success Story" Keynote Speech by Dr Thomas Börs , "1. Design: Advancing Conceptual for Solar Project Solar Impulse"							
15:00 - 15:30		Coffee Break							
15:30 - 16:00	Session	2.1	12.8	2.2	10.1	11.1	2.4	5.6	
15:30 - 16:00	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	
15:30 - 16:00	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 Gliwice	Prof Fryderyk Szczępaniak Air Force Institute of Technology	Prof Zbigniew Kulesza Białystok University of Technology	Prof Gerald Gibson Newcastle University	
15:30 - 15:50	15:30 - 15:50	Integrated aerospace systems design course: an educational experience of Politecnico Di Torino [106] Roberto Fusaro, Marco Vio, Andrea Romiti, Luca Ruggieri, Christian Penazzi	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 1 [106] Roberto Fusaro, Marco Vio, Andrea Romiti, Luca Ruggieri, Christian Penazzi	A vision-based method for supporting autonomous landing control [207] Marcin Chwałka, Tomasz Kozłowski, Andrzej Węwniak, Marcin Kozłowski, Tomasz Płatek, Jacek Pankowski, Grzegorz Gębarowski, Piotr Czerwinski, Paweł Rępański	Finite control of cavity acoustic flow [172] Bartłomiej Kozłowski, Krzysztof Szumowski, Dariusz Janicki	The impact of a growing number of small UAV operations on flight safety within the General Aviation [144] Piotr Malinowski, Jerry Griffin	Study of optimization algorithms for prognostics of electrohydraulic servomechanisms for servomechanisms [237] Marcin Kozłowski, Dariusz Janicki, Paweł Rępański, Marcin Kozłowski, Marcin Kozłowski	Flame and Fire Behaviour of Polymer Composites used in Aviation [271] Bernhard Schuster	
15:50 - 16:10	15:50 - 16:10	A support for the vehicle architecture definition of innovative hypersonic transportation systems during conceptual design [148] Roberto Fusaro, Nicola Vio	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 2 [106] Roberto Fusaro, Nicola Vio	Hardware in the loop tests of the switching controller [207] Leszek Ambrosiak, Cezary Kozłowski, Marcin Kozłowski, Andrzej Węwniak	Prediction of fluid phenomenon using an Efficient Inflow-Engine Wing Solver [11] Janusz Niegowski, Andrzej Ciopek, Marcin Kozłowski, Andrzej Ciopek	A Comprehensive Approach for the Safety Analysis of Remotely Piloted Aircraft Systems [202] Łucja Nowak, Marcin Kozłowski, Grzegorz Gębarowski, Fabio Quagliotti, Stefano Rocaschini, Sandra Gerassio	Influence of location of piezo-actuator hardware on design of active vibration control system with harvesting energy [78] Andrzej Węwniak, Piotr Kozłowski	Comprehensive modelling of a structural laminate [16] Janusz Niegowski, Andrzej Ciopek	
16:10 - 16:30	16:10 - 16:30	Preliminary flight mechanic analysis of a propulsive transport system [148] Witold Kłomczyński, Krzysztof Szumowski, Filip Niegowski	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 3 [106] Witold Kłomczyński, Krzysztof Szumowski, Filip Niegowski	The impact of parametric uncertainty of the model of aircraft on control laws for an automatic emergency response [141] Jerry Griffin, Piotr Malinowski	Prediction of air: trajectory time-unknown based on body, Monte Carlo simulation and Bayesian Inference [222] Aleksandra Rogalska, Marcin Kozłowski, Grzegorz Gębarowski, Robert Anioła, Vito Di Lorenzo, Piotr Góralczyk, Marcin Kozłowski, Sławomir Kozłowski	Concept of the Elastic Launcher for Medium Class of Unmanned Aerial Vehicles [171] Marcin Kozłowski, Marcin Kozłowski, József György	Prognosis: New Method based on Discrete Wavelet Transform Applied to Onboard Biomechanical Characteristics [249] Marcin Kozłowski, Dariusz Janicki, Paweł Rępański, Marcin Kozłowski, Marcin Kozłowski	Intersected cost on composite: how to produce it? [32] Single-Discipline, Single-Discipline	
16:30 - 16:50	16:30 - 16:50	Agile and Quick-Wing Concept Selection [374] Sławomir Kozłowski	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 4 [106] Sławomir Kozłowski	Simulation of High-Reynolds number 3D complex flow [283] Jerry Griffin, Piotr Malinowski	Weight reduction via turbulent boundary layer flow control [106] Andrzej Ciopek, Grzegorz Gębarowski, Filip Niegowski, Filip Niegowski, Filip Niegowski, Filip Niegowski, Filip Niegowski	Probability of detection in IR Thermography evaluation of Unmanned Aerial Vehicles [234] Marcin Kozłowski, Marcin Kozłowski	Full-Of CRFP Structures Under Compressive Load [14] Arthur Guehler Guehler		
16:50 - 17:20	Session	2.1	12.8	2.2	11.1	8.1	5.4	5.8	
16:50 - 17:20	Session Title	Design Challenges for Future Passenger Aircraft	CAFFADOSSA Session	Right Control	Modelling and Simulation of Flight Physics - Part IV	MINI WORKSHOP Future Challenges of Unmanned Aerial Systems Coordinated by Prof Fabio Quagliotti, Politecnico di Torino	Impact Damage formation on Aircraft	Morphing aircraft structures	
16:50 - 17:20	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 Gliwice	Prof Fryderyk Szczępaniak Air Force Institute of Technology	Dr Kamila Kuzon Warsaw University of Technology Prof Grzegorz Labuda Wrocław University of Science and Technology	Prof Yuryu Yovan Middle East Technical University	
17:00 - 17:20	17:00 - 17:20	Design and Sizing of a demonstrable box wing for a general aircraft [106] Andrzej Ciopek, Jan Głuchowski, Dariusz Janicki, Marcin Kozłowski, Filip Niegowski, Filip Niegowski	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 5 [106] Andrzej Ciopek, Jan Głuchowski, Dariusz Janicki, Marcin Kozłowski, Filip Niegowski, Filip Niegowski	Aircraft dispatch assessment tool support and experimental results on flight control architectures [106] Vito Di Lorenzo, Filip Niegowski, Filip Niegowski	Comparison of BAY method of air works operation with a grid-based method [283] Tomasz Kozłowski, Paweł Rępański	Methodical model of the UAV vertical take-off and landing [101] Marcin Chwałka, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	New Real Impact Simulation Models as Composite Reference Models Using Leading Edge [184] Robert Dąbrowski, Wojciech Kozłowski, Marcin Kozłowski, Marcin Kozłowski	Characterization and Reduced Order Model of Impact of Hypersonic Free-Stream and Cases [14] Ławrenty Góralczyk	
17:20 - 17:40	17:20 - 17:40	Wing design guidelines for innovative hypersonic transportation systems [148] Roberto Fusaro, Nicola Vio	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 6 [106] Roberto Fusaro, Nicola Vio	Forming a hollow aircraft profile properties [242] Jacek Szewski	Introduction of the body number in modeling turbulent flow around a blunt body in a stagnating flow [307] Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	Design and analysis of feedback loop to regulate the basic parameters of the unmanned aircraft [302] Marcin Chwałka, Krzysztof Szumowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	Hybrid experimental-numerical analysis of mechanical and thermal impact on composite structures [237] Marcin Kozłowski, Dariusz Janicki, Grzegorz Gębarowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	Fiber braiding process applications for structural health monitoring [37] Carlos Roldán, Javier Rodríguez, Fernando Ramos, Marcin Kozłowski	
17:40 - 18:00	17:40 - 18:00	Conceptual design of a hypersonic airframe civil transportation system [106] Roberto Fusaro, Nicola Vio, Nicola Vio, Dariusz Janicki	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 7 [106] Roberto Fusaro, Nicola Vio, Nicola Vio, Dariusz Janicki	Optimal Design of Control of Flapping Wing using Adaptive Lateral Control [284] Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	Flow plane aerodynamic analysis using Computational Fluid Dynamics methods [272] Aleksandra Rogalska, Marcin Kozłowski, Adam Dulabonka	Unmanned aerial vehicles: Innovations and opportunities [304] Grzegorz Gębarowski	Experimental validation of simulations of tail strike events on composite wing panels [282] George N. Papanicolaou	Design and analysis of a mechanism for the chord and corner morphing of an aircraft wing [102] Filip Niegowski, Janusz Niegowski, Filip Niegowski	
18:00 - 18:20	18:00 - 18:20	Aircraft Loads Prediction using Enhanced Simulation [151] Jonathan Cooper, Jan Głuchowski, Dariusz Janicki, Marcin Kozłowski, Filip Niegowski, Filip Niegowski	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 8 [106] Jonathan Cooper, Jan Głuchowski, Dariusz Janicki, Marcin Kozłowski, Filip Niegowski, Filip Niegowski	Four Optimization Using the Adjoint Method [28] Armin Bagdasarian, Cezary Kozłowski	Drag reduction via turbulent boundary layer flow control [106] Andrzej Ciopek, Grzegorz Gębarowski, Filip Niegowski, Filip Niegowski, Filip Niegowski, Filip Niegowski	Multiflow UAV sensor fusion for precision landing [106] Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	ICONE: Improving the cost-effectiveness of composite transportation systems P2020-MSCA [116 - 2013] [15] Brian G. Robison	Dynamic and Aerostatic Analysis of a Ringless Helicopter Disc with an Active Control Self-Trimming Edge For Forward Flight [247] Dariusz Janicki, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski, Marcin Kozłowski	
18:20 - 18:40	18:20 - 18:40	CEH/HSN Overview Presentation [148] Anna Jędrzej	Coordination Action Pro "Production, Avionics, Design" on Cost-Efficiency in Aeronomics - 9 [106] Anna Jędrzej						
18:40 - 19:00	Room: FAFA	GA EASN Association							