TIme				Paper ID		23 November 2021		
8:00-9:00			Registration					
9:00-9:50			**Opening**				**Aula**	
9:00-9:20	Tomasz Goetzendorf-Grabowski							Welcome by PSAA president
	Franco Bernelli							Welcome by CEAS president
	Zdobysław Goraj							Welcome and Introduction by former CEAS and PSAA president
9:20-9:40	Paweł Stężycki							Welcome speech by Director of the Łukasiewicz Research Network - Institute of Aviation
9:40-9:50	Janusz Frączek							Welcome speech by Dean of The Faculty of Power and Aeronautical Engineering (MEiL), Warsaw University of Technology
10:00-10:25	**Andreas Strohmayer**	on-line	**Plenary Lecture**		**Chair**	**Zdobysław Goraj**		**Challenges for aeronautical research in this decade**
10:25-10:50								**Coffee break**
10:50-12:30	**Session 1/1**	**Mixed**	**Aircraft Design -1**	**Paper ID**	**Chair**	**Zdobysław Goraj**	**Aula**	
10:50-11:10	Stanislav Karpuk	on-line	paper submited	076				Assessment of potential commercial success of business jets with natural laminar flow technology
11:10-11:30	Deni Raco	on-site	paper submited	048				Model-based development and logical AI for secure and safe avionics systems: a verification framework for SYSML behavior specifications
11:30-11:50	Jonathan Cooper	on-site	paper submited	186				Preliminary design of aircraft wings incorporating folding wingtips
11:50-12:10	Pawel Zakrzewski	on-site	paper submited	064				Application of Agile Approach for Development of the Avionics Safety Critical Systems
12:10-12:30								
10:50-12:30	**Session 1/2**	**Full on-site**	**Aerodynamics - 1**		**Chair**	**Łukasz Kiszkowiak**	**Room1**	
10:50-11:10	Karthick Rajkumar	on-site	paper submited	183				Time-efficient simulations of weapon bay in fighter aircraft
11:10-11:30	Witold Klimczyk	on-site	paper submited	141				Prediction of airfoil tonal noise using URANS computations and its mitigation
11:30-11:50	Wit Stryczniewicz	on-site	only presentation	112				Development of small scale wind tunnel model for testing power efficient pulsed jets actuator concepts in H2020 Clean Sky 2 WINGPULSE project
11:50-12:10	Guillaume Coria	on-site	only presentation	113				Modeling and simulation of chemical reactions at the surface of an ablative wall interacting with a hypersonic flow : Application to atmospheric reentry
12:10-12:30								
10:50-12:30	**Session 1/3**	**Full on-site**	**Materials and Structures - 1**		**Chair**	**Antoni Niepokólczycki**	**Room2**	
10:50-11:10	Mirosław Rodzewicz	on-site	paper submited	123				Derivation of conservative load spectrum for fatigue proof test of UAV structure
11:10-11:30	Gregor Neumann	on-site	only presentation	154				Methods for modelling of imperfections of additively manufactured metal components and prediction of the structural properties of imperfect components
11:30-11:50	Desgaches Damien	on-site	only presentation	122				Use of Friction Stir Welding on primary structures of aircrafts instead of riveted junction
11:50-12:10	Zsombor Sápi	on-site	paper submited	107				Structural Development and Manufacturing of the DemoP1 Demonstrator
12:10-12:30	Paweł Skalski	on-site	paper submited	117				Morphing structures
10:50-12:30	**Session 1/4**	**Full on-line**	**Skills for the aerospace sector 1**		**Chair**	**Franco Bernelli**	**Room4**	
10:50-11:10	Paolo Tortora	on-line	paper submited	178				Lessons Learned from Hands-On Nanosat Activities in PEGASUS Universities
11:10-11:30	Marek Kosuda	on-line	paper submited	131				Evolution of the Aeronautics and Aerospace Studies at TUKE in the past 15 years
11:30-11:50	Juan Jose Morillas Guerrero	on-line	paper submited	120				An analysis of the Spanish aerospace sector and its transformative enablers: the case of the start-up ecosystem in Madrid.
11:50-12:10	Jamel Metmati	on-line	paper submited	069				SPACE COMMAND : MANAGE SPACE OPERATIONS IN THE NEW SPACE AGE
12:10-12:30	Tadeusz Uhl	on-line	paper submited	128				UNIVERSEH - European Space University for Earth and Humanity
12:30-13:30								**Lunch**
13:30-13:45								**Award Ceremony**
13:45-14:25	**Martin Wahlich**	on-site	**Plenary Lecture**		**Chair**	**Franco Bernelli**		**Active Flow- Loads- and Noise- Control on next Generation Wing - Overview and Results**
14:30-15:50	**Session 2/1**	**Full on-site**	**Flight Dynamics**		**Chair**	**Tomasz Goetzendorf-Grabowski**	**Aula**	
14:30-14:50	Zdobyslaw Goraj	on-site	only presentation	168				Simulation of a passenger aircraft flight with the wing tip cut using aerodynamics with full separation
14:50-15:10	Agnieszka Kwiek	on-site	paper submited	130				An investigation into directional characteristics of the rocket plane in a tailless configuration
15:10-15:30	Kai San Hon	on-site	paper submited	152				Development of a flight simulator for conceptual aircraft design and sizing
15:30-15:50	Tomasz Małecki	on-site	paper submited	164				Simultaneous Localization and Mapping (SLAM) Problem – description of selected algorithm
14:30-15:50	**Session 2/2**	**Full on-line**	**Control and Flight Tests - 1**		**Chair**	**Jonathan Cooper**	**Room1**	
14:30-14:50	Leonardo Nepomuceno	on-line	paper submited	151				Filter-Error Method for Aerodynamic Parameter Estimation of a Generic Future Fighter
14:50-15:10	Jacek Pieniazek	on-line	paper submited	134				Control in curvilinear approach to landing
15:10-15:30	Marcin Adamczuk	on-line	paper submited	127				Application of biofeedback and adaptive automation for UAV operator performance enhancement
15:30-15:50	Adam Antczak	on-line	paper submited	115				Efficient position of two long-range passenger aircraft in formation flight
14:30-15:50	**Session 2/3**	**Full on-line**	**Space Mission Analysis and Design -1**		**Chair**	**Franco Bernelli**	**Room2**	
14:30-14:50	Lorenzo Giudici	on-line	paper submited	101				Space debris cloud propagation through phase space domain binning
14:50-15:10	Bhavyashree Janardhana	on-line	paper submited	162				Conceptual analysis for a technology demonstration mission of the Ion Beam Shepherd
15:10-15:30	Robert Rogólski	on-line	paper submited	061				MiG-29 and Su-22 aircraft as air-launch platforms for space rockets
15:30-15:50	Sérgio Silva Soares	on-line	paper submited	075				DATASAT - ADA Ground Station Network. Automatic Directional Antenna for Space Communications on LEO Spacecrafts
16:00-16:20	**Fayette S. Collier**	**on-line**	**Plenary Lecture**		**Chair**	**Zdobysław Goraj**		**Toward Environmental Sustainability in Aviation**
16:30-18:00	**CEAS GA**							

TIme						**24 November 2021**		
8:00-9:00			Registration					
							Aula	
9:00-9:45	**Michel Wachenheim**	**on-line**	**Plenary Lecture**		**Chair**	**Franco Bernelli**		**Air Transport and Climate Challenge**
9:45-10:00								**Coffee break**
10:00-11:20	**Session 3/1**	**Full on-site**	**Control and Flight Tests - 2**		**Chair**	**Jonathan Cooper**	**Aula**	
10:00-10:20	Kamila Jakubik	on-site	paper submited	149				Automatic take-off control system
10:20-10:40	Andrea Dan Ryals/ Giulia Bertolani	on-site	paper submited	166				Adaptive Attitude Control of an Unmanned Helicopter
10:40-11:00	Albert Zajdel	on-site	paper submited	088				Next-generation more electric aircraft control system
11:00-11:20	Carlo Bettanini	on-site	paper submited	229				Evaluation of light pollution sources over Pistoia area with an autonomous payload for sounding balloons.
10:00-11:20	**Session 3/2**	**Mixed**	**Materials and Structures - 2**		**Chair**	**Mirosław Rodzewicz**	**Room1**	
10:00-10:20	Johannes Dillinger	on-line	paper submited	087				Structural Optimization of an Aeroelastic Wind Tunnel Model for Unsteady Transonic Testing
10:20-10:40	Nicolo Fabbiane	on-site	paper submited	081				Aeroelastic-Tailoring of a Wind-Tunnel Model for Passive Alleviation of Static and Dynamic Loads
10:40-11:00	Giuseppe Mantegna	on-site	paper submited	090				DESIGN OF MULTILAYERED VAT PANELS BY MEANS OF HIGHER-ORDER PLATE ELEMENTS
11:00-11:20	Giuseppe Catapane	on-site	paper submited	086				Evaluation of improved correction factors for the prediction of Helmholtz resonances
10:00-11:20	**Session 3/3**	**Full on-line**	**Spacecraft Design**		**Chair**	**Franco Bernelli**	**Room2**	
10:00-10:20	Aysha Alharam	on-line	paper submited	070				Linear CubeSat Center of Gravity Optimization
10:20-10:40	Derick Fernando Oliveira Fernandes	on-line	paper submited	147				Structural Design and Analysis of a Student CubeSat 1U
10:40-11:00	Inna Bashlii	on-line	paper submited	185				High-frequency stability evaluation of liquid rocket thrust chamber
11:00-11:20	Nikolay Kuleshov	on-line	paper submited	053				Some results of research on the LatLaunch project for the launching system of pico- and nanosatellites into low Earth orbit
11:20-11:40								**Coffee break**
11:40-12:40	**Session 4/1**	**Full on-site**	**Skills for the aerospace sector 2**		**Chair**	**Tomasz Goetzendorf-Grabowski**	**Aula**	
11:40-12:00	Jacek Mieloszyk	on-site	paper submited	014				The role of PEGASUS in the European aeronautics and space universities exchange of students and professors
12:00-12:20	Salvo Marcuccio	on-site	paper submited	171				Science, Technology and Systems Engineering Educational Activities with Stratospheric Balloons
12:20-12:40	Franco Bernelli	on-site	paper submited	042_1				Evolution of the (Aero)Space Engineering Studies in Italy in the past 20 years
12:40-13:00	Miroslav Šmelko			173				Transfer of the Knowledge Gathered During the Mission of the skCUBE and the GRBAlpha Satellites Into the Education Process
11:40-12:40	**Session 4/2**	**Full on-line**	**UAVs - 1**		**Chair**	**Zdobysław Goraj**	**Room1**	
11:40-12:00	Cristina Beneitez Ortega	on-line	paper submited	080				Thermal Management Concept Evaluation for a High-Altitude Solar Platform
12:00-12:20	Mateusz Kucharski	on-line	paper submited	172				Comparison of high camber airfoil with high lift devices in light unmanned aerial vehicles
12:20-12:40	Gazmend Mavraj	on-line	paper submited	118				A Systematic Review of Ground-Based Infrastructure for the Innovative Urban Air Mobility
12:40-13:00	Jakub Pyra	on-line	only presentation	056				Augmented, multi-purpose drone optic-flow odometry sensor with altitude measurement correction
11:40-12:40	**Session 4/3**	**Full on-site**	**Aerodynamics - 2**		**Chair**	**Krzysztof Szafran**	**Room2**	
11:40-12:00	Łukasz Kiszkowiak	on-site	paper submited	157				Aerodynamic analysis using Computational Fluid Dynamics methods in the development process of an aerobatic aircraft
12:00-12:20	Nezar Sahbon	on-site	paper submited	091				CFD study of base drag of the Grot rocket
12:20-12:40	Mariachiara Gallia	on-site	paper submited	156				Optimization of a nacelle electro-thermal ice protection system for icing wind tunnel testing
12:40-13:00								
13:00-14:00								**Lunch**
14:00-15:20	**Session 5/1**	**Full on-site**	**Green Aircraft/Clean Sky**		**Chair**	**Jacek Mieloszyk**	Aula	
14:00-14:20	Daniel Frank	on-site	only presentation	047				Exhaust Emission Measurement and Analysis of a Rotax 915 Aircraft Piston Engine with Conventional and Alternative Fuels
14:20-14:40	Pieter-Jan Proesmans	on-site	paper submited	054				Hydrogen Aircraft Design Optimisation for Minimal Global Warming Impact
14:40:15:00	Michel Van Eenige	on-site	paper submited	046				CLAIRPORT - Environmental impact assessments at airport level in Clean Sky 2 TE
14:00-15:20	**Session 5/2**	**Full on-site**	**UAVs - 2**		**Chair**	**Mikołaj Jarkowski**	**Room1**	
14:00-14:20	Luis Miguel García-Cuevas González	on-site	paper submited	143				Feasibility study of a fuel cell-powered unmaned aerial vehicle with 75 kg of payload
14:20-14:40	Aleksandra Pasich	on-site	paper submited	145				Proposal of reorganization in airspace structure and other facilities for the needs of future Unmanned Aircraft services
14:40:15:00	Karol Bęben	on-site	paper submited	136				Architecture of the UAV Swarm Command and Control Systems - an overview
14:00-15:20	**Session 5/3**	**Full on-line**	**Aerodynamics - 3**		**Chair**	**Krzysztof Szafran**	**Room2**	
14:00-14:20	Ashish Vashishtha	on-line	paper submited	129_1				Numerical study of an Aerospike Nozzle in Retropropulsion
14:20-14:40	Ashish Vashishtha	on-line	paper submited	129_2				Effects of Freestream Disturbances in front of Spiked Blunt Nose at Hypersonic Flow
14:40:15:00	Ndivhuwo Musehane	on-line	paper submited	109				Effect of significant deceleration on boundary layer properties of a laminar flat plate
15:00-18:00	**CEAS BoT**							
19.00- ..	**GALA DINNER**							

TIme						**25 November 2021**		
8:00-9:00			Registration					
							Aula	
9:00-9:45	**Arne Seitz**	**on-line**			**Chair**	**Zdobysław Goraj**		**Fuselage BLI Propulsion Integration - Insights from H2020 CENTRELINE**
9:45-10:00								**Coffee break**
10:00-11:40	**Session 6/1**	**Mixed**	**Satellite Dynamics and Control**		**Chair**	**Salvo Marcuccio**	**Aula**	
10:00-10:20	Gabrielle Esnault	on-site	paper submited	102				Design and CFD analysis of the LOX/LCH4 dual regenerative cooling circuit of the DemoP1 Demonstrator
10:20-10:40	Szabolcs Grünvald	on-site	paper submited	083				Attitude Control System of an Earth Observation Satellite
10:40-11:00	Jason Calvi	on-line	paper submited	067				Machine Learning Techniques for Detection and Tracking of Space Objects in Optical Telescope Images
11:00-11:20	Mashairo Kanazaki	on-line	paper submited	175				Stage Separation Dynamics Optimization to Avoid Collision During TSTO Separation by Aerodynamics and Flight Dynamics Simulation
11:20-11:40	Krystian Borodacz	on-site	only presentation	096				Optimal space debris deorbitation strategy
10:00-11:40	**Session 6/2**	**Full on-line**	**Aircraft Design -2**		**Chair**	**Tomasz Goetzendorf-Grabowski**	**Room1**	
10:00-10:20	Michael Rohdenburg	on-line	paper submited	084				Holistic Low-Effort Model for Damage Tolerance Analysis in Preliminary Design
10:20-10:40	Bartłomiej Dziewoński	on-line	paper submited	045				Preliminary design of a supersonic passenger aircraft
10:40-11:00	Michał Jędrak	on-line	paper submited	161				Finite Element Analysis of the Suspended Satellite Rocket Weight Effect on the Strength and Deformability of the MiG-29 Aircraft Structure
11:00-11:20	Daniel Schmeling	on-line	paper submited	140				Overhead cooling device reducing thermal stratification at displacement ventilation
11:20-11:40								
10:00-11:40	**Session 6/3**	**Full on-line**	**Materials and Structures - 3**		**Chair**	**Mirosław Rodzewicz**	**Room2**	
10:00-10:20	Cheng Angelo Yan	on-line	paper submited	066				Analysis of Lightweight Structures using Physics Informed Neural Networks
10:20-10:40	Mirco Zaccariotto	on-line	only presentation	165				Efficient modelling of fatigue crack propagation with a FEM-peridynamics coupled approach
10:40-11:00	Florian Franke	on-line	paper submited	111				Investigation of impacts between unmanned aerial vehicle motors and various targets
11:00-11:20	Renaud Bertoni	on-line	paper submited	132				Predictive approach of rotating equipment, gears and bearing faults
11:20-11:40	Marco Lo Cascio	on-line	paper submited	082				A hybrid VEM/BEM numerical technique for simulating damage in composite materials
11:40-12:00								**Coffee break**
12:00-13:20	**Session 7/1**	**Full on-site**	**Space Mission Analysis and Design -2**		**Chair**	**Salvo Marcuccio**	**Aula**	
12:00-12:20	Franco Bernelli	on-site	paper submited	042_2				Feasibility analysis of GNSS-based navigation for LUMIO mission
12:20-12:40	Franco Bernelli	on-site	paper submited	042_3				Re-entry predictions of space debris for collision avoidance with air traffic
12:40-13:00	Xingchuan Liu	on-site	paper submited	085				Model predictive control for rigid satellite formation with underactuated propulsive system based on relative orbital elements
13:00-13:20	Niels Bakx	on-site	paper submited	199				Using Solar-sail Induced Dynamics to Increase the Warning Time for Solar Storms Heading Towards Earth
12:00-13:20	**Session 7/2**	**Full on-line**	**Aerodynamics - 4**		**Chair**	**Łukasz Kiszkowiak**	**Room1**	
12:00-12:20	Kazuhisa Chiba	on-line	paper submited	150				Acquisition of Swept Aerodynamic Data by Consecutive Change of Wing Model Configuration in Wind Tunnel Tests Using Remote and Feedback Control
12:20-12:40	Dominik Schäfer	on-line	paper submited	089				Nonlinearities in off-diagonal GAF matrix elements in the scope of T-tail flutter
12:40-13:00	Stefano Bortolotti	on-line	paper submited	142				A variable fidelity optimisation procedure for multi-airfoil design
13:00-13:20	Yeongmin Jo	on-line	only presentation	158				Development of A Mid-Fidelity Aerodynamic Analysis Code for eVTOL Aircrafts
12:00-13:20	**Session 7/3**	**Full on-line**	**UAVs - 3**		**Chair**	**Mikołaj Jarkowski**	**Room2**	
12:00-12:20	Mariusz Jacewicz	on-line	paper submited	126				Quadrotor motion analysis and control in wind field environment
12:20-12:40	Dominik Tokarz	on-line	paper submited	155				VR environment for UAV pilots training with automated flight assessment system
12:40-13:00	Michal Skowron-Nadulski	on-line	paper submited	092				Data fusion concept for a sense and avoid system on-board small UAV
13:00-13:20								
13:20-14:20								**Lunch**
14:30			**Closing ceremnoy**					