

AGENDA



3rd EASN Association International Workshop on AeroStructures

9th-11th October 2013, Milan, Italy



Politecnico di Milano
DIPARTIMENTO DI MECCANICA



Time		DAY ONE—9/10/2013	
9:00	10:00	Registration	
10:00	10:30	Welcome and Introduction	
10:30	11:00	Keynote Lecture: "Research in Europe - Enhancing collaboration between Industry and Academia", G. Bertolone, President & Chairman of the Italian Cluster for Aerospace Technology	
11:00	11:30	Coffee Break	
11:30	11:50	ALASCA Project: Advanced Lattice Structures for Composite Airframes; An Overview presentation C. Hühne	MAAXIMUS Project: Presentation 1, Title to be Announced
11:50	12:10	Design and numerical Validation of a Lattice Fuselage Structure Concept S. Niemann, T. Ludwig	Presentation 2, Title to be Announced
12:10	12:30	Weight analysis of alternative composite fuselage barrels on the basis of the multi-level algorithm A. Shanygin, E. Dubovikov, V. Fomin, I. Kondakov	Presentation 3, Title to be Announced
12:30	12:50	FE modeling of lattice composite fuselage elements for general and local strength analyses I. Kondakov, E. Dubovikov, V. Fomin	Presentation 4, Title to be Announced
12:50	13:50	Lunch Break	
13:10	14:00	Topology and parametric optimization of a lattice composite fuselage structure D. Liu, V. V. Toropov, O. M. Querin	Presentation 5, Title to be Announced
14:00	14:20	Weight estimation of composite grid-stiffened fuselage structures critical to skin buckling M. Weber, P. Middendorf	Presentation 6, Title to be Announced
14:20	14:40	Development of geodesic composite fuselage structure for perspective airliner A. Razin, V. Vasiliev, V. Nikitjuk	IASS Project: Improving the Aircraft Safety by Self-Healing Structure and Protecting Nanofillers; An Overview Presentation L.Guadagno
14:40	15:00	Impact strength of elements of lattice composite fuselage structure A. Chernov, A. Shanygin	Application and scientific potential of self-healing nano-composites S. Rana, A. S. Nya, P. Zare, D. Döhler, Ph. Michael, A. Stojanovic, W. H. Binder
15:00	15:30	Coffee Break	

DAY ONE—9/10/2013 (afternoon)

Time			
15:30	15:50	<p><i>Development of Cut-out Framing in Lattice Composite Fuselage Barrel</i> A. Korneev, V.Katukov</p>	<p><i>Thermal Degradation and fire properties of epoxy modified resins</i> M. Raimondo,, L. Vertuccio, G. Barra, L. Bonnaud, O. Murariu, Ph. Dubois, S. Russo L. Guadagno</p>
15:50	16:10	<p>CHANGE Project: <i>Combined morphing assessment software using flight envelope data and mission based morphing prototype wing development; An overview Presentation</i> Y. Yaman</p>	<p><i>Modelling of the fracture toughening in carbon nanotube-reinforced</i> K. I. Tserpes and C. Chamakiotis</p>
16:10	16:30	<p><i>Using Compliant Structures for the Design of Adaptive Camber Morphing Wings</i> A. De Gaspari , S. Ricci.</p>	<p><i>Fire Resistance of Aeronautic Resins</i> M. Raimondo, S. Chirico, L. Guadagno, P. Longo, A. Mariconda, L. Bonnaud, O. Murariu, Ph. Dubois</p>
16:30	16:50	<p><i>Design, analysis and optimization of thin walled semi-monocoque wing structures using different structural idealizations in the preliminary design phase</i> O. Dabaneh, A. Kayran</p>	<p><i>Healing Efficiency and Dynamic Mechanical Properties of self-healing epoxy systems</i> L. Guadagno,, M. Raimondo, C. Naddeo, P. Longo, A. Mariconda, W. H. Binder</p>
16:50	17:10	<p>Round Table: <i>Research trends and innovative solutions for Fuselage & Wing structures</i></p>	<p><i>Exfoliated graphite as conductive filler in aeronautic epoxy mixtures</i> L.Guadagno, M. Raimondo, V. Vittoria, L. Vertuccio, K. Lafdi, B. De Vivo, P. Lamberti, G. Spinelli, V. Tucci</p>

END OF DAY ONE

Time		DAY TWO—10/10/2013		
8:30	9:00	Registration		
9:00	9:30	Keynote Lecture: "Trends & Developments on Aerostructures", M. Kyriakopoulos, EC Officer		
9:30	10:00	Keynote Lecture: "JTI CLEANSKY", G. Pagnano, Coordinating Project Officer		
10:00	10:30	Coffee Break		
10:30	12:00	4th EASN General Assembly		
12:00	13:00	Lunch Break		
	13:00	Beginning of Vote Casting for EASN BoD		
13:00	13:20	COLTS Project: Casting of Large Ti structures; An Overview Presentation M.H. Loretto	FLY-BAG2 Project: Advanced technologies for bomb-proof cargo containers and blast containment units for the retrofitting of passenger airplanes; An overview Presentation D. Zangani	LOCOMACHS Project: LOW COst Manufacturing and Assembly of Composite and Hybrid Structures; An overview Presentation L. Bottero
13:20	13:40	<i>Modelling and experimental work on large centrifugal and gravity castings of Ti6Al4V</i> O. Koeser	ENCOMB Project: ENCOMB: Investigation of quality assurance concepts for adhesive bonding of aircraft composite structures by extended NDT M. Hoffmann	CERFAC Project: Towards more cost efficient reinforcements in composite fastener areas; An Overview Presentation D. Dumas
13:40	14:00	<i>Microstructure, Properties, NDT and dimensional assessment of large Ti6Al4V castings</i> Xi. Hao	<i>The effects of pre-bond contamination and poor curing of the adhesive on the fracture toughness of composite bonded joints</i> K.I. Tserpes, D.N. Markatos & Sp. Pantelakis	WASIS Project: Wafer design Approach for Safety Increasing in worst case Situations and joints minimizing; An Overview Presentation R. Cordero
14:00	14:20	INMA Project: Innovative Manufacturing of complex Ti sheet components; An Overview presentation M. Penalva Oscoz	<i>Extended NDT methods for pre-bond inspection of CFRP surfaces</i> K. Brune	<i>Determination optimal structural parameters of wafer fuselage structure produced by continuous winding</i> I. Taranenko, S. Krivenda
14:20	14:40	<i>Evaluation on advantages of vibration assisted drilling in aerospace stack materials</i> A.S. González, F. Veiga Suárez, G. Rodríguez Canas, M. Penalva Oscoz, A. Rivero Rastrero	<i>Extended NDT methods for evaluation of CFRP adhesive bonds</i> W. Ostachowicz	<i>Assessing the quality of adhesive bonded joints using an innovative neural network approach</i> C. Katsiropoulos, E. Drainas, Sp. Pantelakis
14:40	15:10	Coffee Break		

Time		DAY TWO—10/10/2013 (afternoon)		
15:10		End of Vote Casting for EASN BoD		
15:10	15:30	MERLIN Project: Development of Aero Engine Component Manufacture using Laser Additive Manufacturing; An Overview Presentation J. Allen	EVITA Project: Non-Destructive Evaluation, Inspection and Testing of Primary Aeronautical Composite Structures Using Phase Contrast X-Ray Imaging (EVITA); An Overview Presentation A.M. Madrigal	BOPACS Project: Boltless assembling Of Primary Aerospace Composite Structures; An overview Presentation K. Tserpes
15:30	15:50	<i>The use of Laser Metal Deposition for the Manufacture of Aerospace Components</i> C. Hauser	<i>Phase Contrast X-Ray Imaging : an advanced inspection solution to detect micro-defects in polymers and composite materials</i> A.M. Madrigal	CORSAIR Project: Cold spray radical solution for aeronautic improved repairs; An overview presentation M. Guagliano
15:50	16:10	<i>Selective Laser Melting of Nickel-Based Superalloys: Process Development towards Manufacturing of Aeronautic Components</i> W. Meiners, J. Risse	<i>Non-Contact – Non-Destructive Testing for Damage Detection of Composite Materials</i> G. Pandarese, M. Martarelli, A. Cavuto, P. Castellini, G.M. Revel	Round Table: Research trends and innovative solutions for Integral VS Differential structures; advances & potential applications
16:10	16:30	Round Table: Research trends and innovative solutions for manufacturing of Structures & Components	QUICOM Project: Quantitative Inspection of Complex Composite Aeronautic Parts Using Advanced X-ray Techniques; An Overview Presentation C. Heinzl, J. Kastner	
16:30	17:00	Announcement of voting results & Assembly of the elected EASN BoD		
END OF DAY TWO				

Round Table Discussions

The round table discussions will aim at shaping a consolidated view on the needs for future research activities in the area.

These views will be endorsed and supported by EASN in the Groups and Forums in which it participates.

Optional Dinner

An optional dinner will be organized on 10/10/2013 (day two). Information about the location and cost will be announced.

Time		DAY THREE—11/10/2013	
8:30	9:00	Registration	
9:00	9:30	Keynote Lecture: TBA, Prof. M. Aliabadi, Imperial College	
09:30	10:00	Coffee Break	
10:00	10:20	CSA: HERMES, <i>Establishing a Comprehensive transport research information management & exchange system</i> G. Kotsikos	QUICOM Project: <i>High energy CT scanning applied to large aerospace samples</i> U. Hassler, M. Boehnel, G. Errmann, A. Osman
10:20	10:40	CSA: Promo-Air, <i>Promoting Aeronautics Innovation and Research</i> A. Chamos	<i>Imaging of the light composite structures utilizing large area single photon counting detector</i> J. Jakubek, M. Jakubek, I. Jandjsek, M. Platkevic, P. Soukup, D. Turecek, D. Vavrik, J. Zemlicka
10:40	11:00	CSA: CATER, <i>Coordinating Air transport Time Efficiency Research</i> J. Cogan	<i>Using micro-CT for studying inner structures of CFRP components</i> E. van de Castele et al.
11:00	11:20	CSA: CAPPADOCIA, <i>Coordination Action Pro "Production, Avionics, Design" on Cost-efficiency in Aeronautics</i> F. Marty	<i>CFRP Modeling and X-Ray Imaging Simulation</i> K. Bliznakova, A. Dermitzakis, Z. Kamarianakis, I. Buliev, N. Pallikarakis
11:20	11:40	CSA: FLY HIGHER, <i>Shaping the new evolving generation of aeronautic professionals</i> G. Gonçalves	<i>Noise Source Identification in Aircraft Cabins by Means of Acoustic Imaging Techniques: Selective Acoustic Intensity and Average Beamforming</i> M. Martarelli, P. Chiariotti, P. Castellini, G.M. Revel, E.P. Tomasini
11:40	12:00	CSA: GRAIN, <i>Greener Europe-China Networking in Aeronautics through projects GRAIN and GRAIN2</i> G. Bugada	Round Table: Research trends and innovative solutions for NDT of composite Materials.
12:00	13:00	Lunch Break	
13:00	13:20	ESTOLAS Project: <i>Analysis of the design features and flying-technical characteristics of the ESTOLAS hybrid aircraft prototype</i> A. Urbahs, V. Petrovs, A. Jakovlevs	DAEDALOS Project: <i>Dynamics in Aircraft Engineering Design and Analysis for Light Optimized Structures; An Overview Presentation</i> C. Bisagni
13:20	13:40	<i>Experimental research of aerodynamic characteristics of the ESTOLAS hybrid aircraft prototype</i> A. Urbahs, D. Titovs, V. Petrovs, S. Luckinskis, A. Aleksandrovs, K. Eglitis	<i>Development of lowest weight - high strength alloy fuselage panels for Laser beam welding</i> J. Standfussa, D. Dittricha, B. Brennera
13:40	14:00	<i>Assessment of possibility exploitation of short take-off and landing all-surface (ESTOLAS) hybrid aircraft at typical European aerodromes</i> A. Urbahs, V. Petrovs, M. Urbaha, K. Carjova	<i>Thermo-oxidative induced shrinkage and damage onset in composite materials for high temperature applications</i> M. Gigliotti, M. Minervino, M.C. Lafarie-Frenot, J.C. Grandidier
14:00	14:20	<i>ACARE and Flightpath 2050 impacts on hybrid aircraft ESTOLAS development</i> V. Papkov	<i>Delamination Development and Strength of Layered Composite in Post-Buckling</i> V. Pavelko
14:20	14:40	<i>Certification Requirements for hybrid aircraft</i> W. Oomkens, O. Zysk, B. Kasiske	<i>On Tapered Thin-Ply NCF Laminates</i> C. York
14:40	15:00	<i>Particular Risk Analysis: Impact on hybrid aircraft design</i> W. Oomkens, O. Zysk, B. Kasiske	

END OF DAY THREE

Participating Projects



DAEDALOS



INMA



CLEANSKY
Joint Technology Initiative
for Aeronautics & Air Transport



Improving aircraft safety by self healing structure and protecting nanofilms



wasis
project



COld spray Radical Solutions for Aeronautic Improved Repairs



Your future takes off here!



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