

2nd EASN WORKSHOP On Flight Physics And Propulsion, Prague 31st Of October – 2nd Of November 2012

PROGRAM OVERVIEW

DAY ONE - 31/10/12

8:00 - 9:00		Registration
9:00 - 9:30	Opening Session: Welcome Addresses By EASN President Prof. Pantelakis And Mr Kašpar, General Director Of VZLU and President of Ass. of Aviation Manufacturers of The Czech Republic (ALV). Opening of the Conference by conference Co-Chairmen Prof. Panidis, Dr. Patek, Prof. Wilson.	
9:30 - 10:00	Keynote Lecture: "The Research Framework Programme Contributing To Europe' Vision For A Sustainable Aviation ", Dr Diederich Knoertzer, EC Officer	
10:00 - 10:30	Keynote Lecture: "Technologies For Environmentally Friendly Aero Engines Of The Future", Uwe Heßler, Rolls-Royce Deutschland	
10:30 - 11:00	Keynote Lecture: "Turbulence-Resolving Modelling And Its Use In Aeronautic Applications", Prof. Shia-Hui Peng, FOI & Chalmers University	
11:00 - 11:20		Coffee Break
11:20 - 11:40	IDIHOM Project: "Overview of the IDIHOM Project on Industrialization of Higher-Order Methods for Aeronautical Applications", N. Kroll (ID. 28)	11:20 - 11:40 ESPOSA Project: "Efficient Systems and Propulsion for Small Aircraft (ESPOSA) - A FP7 Project for General Aviation", Karel Paiger (ID. 23)
11:40 - 12:00	"Towards Complex Turbulent Flow Computations With Higher-Order Methods", T. Leicht, A. Colombo (Id. 29)	11:40 - 12:00 "The Preliminary Analysis of Inlet and Outlet Position in Case of Engine Cooling", A. Dziubiński (Id. 24)
12:00 - 12:20	"High Resolution Discretizations for Reliable and Accurate DNS, LES and Hybrid RANS-LES in an Industrial Context", K. Hillewaert (Id. 30)	12:00 - 12:20 "Influence of Non-Uniform Inflow Conditions on Propeller Performance in Tractor Configuration", M. Kotsonis, L.Veldhuis, G.Eitelberg (Id. 25)
12:20 - 12:40	"Numerical Simulation Of Subsonic and Transonic Flow Over an Oscillating Wing", P.Furmánek, J.Fürst, K. Kozel (Id.04)	12:20 - 12:40 "Aerodynamic and Acoustic Analysis of a Full Aircraft/Propeller Configuration", M. G. Cojocaru, M. L. Niculescu, M. V. Pricop (Id. 26)
12:40 - 13:00	NOVEMOR Project: "Novel Air Vehicles Configurations: From Fluttering Wings to Morphing Flight", Overview Presentation - A. Suleman (Id. 44)	12:40 - 13:00 "Comparison of Simplified and Advanced Thermo-Fluid Models for Nacelle Ventilation", P. Furmański, J. Banaszek, P. Łapka, M.Seredyński (Id. 27)
13:00 - 14:00		Lunch Break
14:00 - 14:20	MARS Project: "Mars Project: an Euro-Chinese Collaborative Research Project", G. Bugeđa, Sun J., N. Qin, Dong J., J. Pons-Prats (Id. 37)	14:00 - 14:20 ECATS Project: "Alternative Fuels", C.W. Wilson (Id. 50)
14:20 - 14:40	"'Modifications of Reynolds Stresses by Localized Unsteady Forcing' N. Benard, P. Sujar-Garrido, V. Parezanovic, B. Noack, E. Moreau, And J.P. Bonnet (ID.38)	14:20 - 14:40 "The Atmospheric Impacts of Alternative Fuels in Aviation", S. Christie, D. Raper (ID. 20)
14:40 - 15:00	"Hybrid RANS/LES for Active Flow Control Using Oscillating Surfaces and Fluidic Vortex Generator", N. Qin (Id.39)	14:40 - 15:00 "Adaptation for Sustainable Fuel", R. Kurtenbach, Y.Elshorbany, P. Wiesen (Id. 19)
15:00 - 15:20	"Formulation of The Optimization Problem for Engine Mount Design – Tractor Propeller Case", T. Goetzendorf – Grabowski (Id. 06)	15:00 - 15:20 "Experimental Study on the Influence of Pressure And Temperature on the Burning Velocity and Markstein Number of Conventional and Alternative Jet Fuels", V. Vukadinovic, P. Habisreuther, N. Zarzalis (Id. 22)
15:20 - 15:40	"Aircraft Propeller Simulation in a Rotating Frame of Reference" F. Cariglino, N. Ceresola, R. Arina (Id. 02)	15:20 - 15:40 "Compatibility of Spray Characteristics of Alternative Fuels for Aviation", An. P. Vouros, Al. P. Vouros, T. Panidis (Id. 21)
15:40 - 16:00	"Propeller for High Altitude Solar Powered Plane", W. Zalewski, W. Stalewski, J. Żóttak (Id.15)	15:40 - 16:00 AHEAD Project : "New Engine Architecture for Future Aircraft", Ad De Graaff, (Id.36)
16:00 - 16:20		Coffee Break
16:20 - 16:40	"Simulation of a Propeller Effect in Wind Tunnel", J. Cervinka (Id. 07)	16:20 - 16:40 FACTOR Project: "Full Aero-Thermal Combustor-Turbine Interaction Research", Overview Presentation, C. Battisti (Id.41)
16:40 - 17:00	"The Preliminary, Parametric Design and Optimisation of the Air-Intake System and the Nacelle as Part of Integration of Turboprop Engine in a Small Aircraft", W.Stalewski, J. Żóttak (Id. 14)	Factor Project Technical Paper (Id.42)
17:00 - 17:20	"Optimization of the External Nacelle Shape for a Turboprop Engine", S. Kubacki, A. Jaworski, Ł. Łaniewski-WoŃk, J. Rokicki (Id. 09)	Factor Project Technical Paper (Id.51)
17:20 - 17:40	"Multiple Objective Optimization of the Power Unit for a Very Light Jet", A. Majka (Id. 01)	17:20 - 17:40 "Modelling of Bypass-Transition in Turbine Blade Cascade" P. Straka, J. Příhoda (Id. 11)
17:40 - 18:00	"Numerical Propeller Disk Replacement", N. Žižkovský, J. Pelant (Id. 17)	17:40 - 18:00 "A Numerical Smith Diagram Revision for Modern Low Pressure Turbine Profiles", F. Bertini, F. Larocca, E. Ampellio (Id.03)
18:00	END OF DAY ONE	

DAY TWO - 1/11/12

8:00 - 9:00				Registration			
9:00 - 9:30		Keynote Lecture: "Integrated Technologies for New Generation Intelligent Aircraft", Dr. Alfonso Apicella, Ingegneria Tecnica Alenia Aermacchi					
9:30 - 10:00		Keynote Lecture: "Challenges and Trends in Future Aero Engine Design and Technology", Dr. Klaus Rued, MTU Aero Engines GmbH					
10:00 - 10:30		Keynote Lecture: "Technology Developments Required for Electrically Powered Aircraft", Prof. Peter Malkin, Cranfield University					
10:30 - 10:50		"Clean Sky Major Technologies And Demonstrators In Flight Physics And Propulsion", Giuseppe Pagnano, Clean Sky JU (ID. 31)					
10:50 - 11:10		Coffee Break					
11:10 - 11:30	JTI Clean Sky Project: "SFWA Smart "Laminar Wing": Status and Results of Ground Tests and Manufacturing of Laminar Wings for Flight Test", J. Koenig (Id. 32)	11:10 - 11:30	AIRCRAFTFIRE Project: " Research Problematics To Increase Fire Safety and Survival of the Passengers in the New Generation Aircraft", J-M. Most (Id. 40)				
11:30 - 11:50	"Design and Analysis of Noise Shielding after Bodies for Bizjets", P. Rostand (Id. 33)	11:30 - 11:50	"Selected Flight Dynamics Models & Computational Procedures Used In Different National and International Projects", Z. Goraj (Id.16)				
11:50 - 12:10	"Aerodynamic Design and WT Tests of NLF Wing for Regional A/C in Transonic Cruise and High-Lift Configurations", R. Gemma, (Id. 34)	11:50 - 12:10	"A Novel Approach for Trajectory Tracking of UAVs" L. De Filippis, G. Guglieri, F. Quagliotti (Id.05)				
12:10 - 12:30	"Multi-Objective Aerodynamic Optimization of Engine Installation Design into Rotorcrafts", A. Garavello, E. Benini, R.Ponza (Id. 35)	12:10 - 12:30	"In-Flight Emergency Landing Routing Using Trajectory Optimization", R. Fernandes De Oliveira (Id. 12)				
12:30 - 13:30		Lunch Break					
13:30 - 13:50	"Simulation of the Helicopter Manoeuvres Close to Boundaries of VRS", K.Grzegorzcyk (Id. 08)	13:30 - 13:50	"Experimental and Numerical Investigation of a Swirl Stabilized Premixed Methane/Air Flame" O. Tunçer, B. Kaynaroglu (Id. 10)				
13:50 - 14:10	"Bolt-Joint Structural Health Monitoring by Method of Electromechanical Impedance", V. Pavelko, I. Ozolinsh, S. Kuznetsov, I. Pavelko (Id. 13)	13:50 - 14:10	"Combustion Modelling of High-Reynolds-Number Premixed Turbulent Jet Flame", M. Chekired, Z. Nemouchi, M.S. Boulahlib (Id. 18)				
14:10 - 14:25		CAPPADOCIA Project: J-L. Bonafe (Id. 49)					
14:25 - 14:35				Presentation Of The EASN Endorsed Projects For The 6th FP7 Call			
14:25 - 14:35	EASN Endorsed Project: EFRA - Environmental Friendly Aircraft - A.G. Rao (Id.53)	14:25 - 14:35	EASN Endorsed Project: MULMON - Multilevel Data Integration in Structural Health Monitoring – A. Apicella (Id. 52)				
14:35 - 14:45	EASN Endorsed Project: CORSAIR - Cold Spray Radical Solutions for Aeronautic Improved Repairs – S. Vezu (Id. 45)	14:35 - 14:45	EASN Endorsed Project: VIVID- Virtual Assessment of Low-Velocity Impact Damage in Composite Airframes – K. Tserpes (Id. 47)				
14:45 - 14:55	EASN Endorsed Project: Mover2 - Multilevel/Multidisciplinary Optimisation for Design of Aeronautical Structures – J. Diaz Garcia (Id.46)	14:45 - 14:55	EASN Endorsed Project: Ti-TECH - Additive Manufacturing Techniques for Aerospace Titanium Components – D. Mourtzis (Id. 54)				
14:55 - 15:15		Coffee Break					
15:15 - 15:35	GABRIEL Project: "Using the Magnetic Levitation Technology to Assist the Aircraft Take-Off and Landing", J. Rohacs (Id. 43)	15:15 - 15:25	EASN Endorsed Project: DREAMCOMP - A Universal Approach in Developing Robust and Energy Efficient Monitoring, Optimisation and Control Technologies for Economic Composites Processing - M. Papadopoulos (Id. 48)				
15:35 - 15:55		15:25 - 15:35	EASN Endorsed Project: AISHA + - Aircraft Integrated Structural Health Assessment + , M. Papadopoulos				
15:35 - 15:55	Discussion on GABRIEL Project						
16:00 - 17:30		3rd EASN General Assembly					
				END OF DAY TWO			

DAY THREE 2/11/12

Excursions to Aeronautic Companies and Research Centres in Prague,
The exact schedule will be circulated as soon as it will be available.