# 2013 LMS European Aerospace Conference

Addressing structural and system engineering challenges enabled by closed-loop system driven product development











# Addressing structural and system engineering challenges enabled by closed-loop system driven product development

#### **Fact and Figures**

- 3 high-level customer Keynote presentations (Airbus, Intespace, Rolls-Royce)
- More than 40 technical presentations
- More than 200 professional attendees expected

#### **Exceptional speaker panel**

The LMS Aerospace Conference will host M. Frank Airoldi (Chairman & CEO of INTESPACE) M. Ed Green (Chief of Mechanical Methods at Rolls-Royce) and M. Dominique Barthe (Head of Structure Capabilities ISAMI at Airbus) as Keynote Speakers. World reknown companies such as AIRBUS, AIRCELLE SAFRAN Group, ALENIA AERMACCHI, EADS ASTRIUM, EMBRAER, EUROCOPTER, HISPANO SUIZA (SAFRAN Group), MAGNAGHI AERO, RUAG Space, SNECMA (SAFRAN Group), SONACA, THALES ALENIA SPACE, TURBOMECA (SAFRAN group) etc. already confirmed their participation as speakers and will present on their latest applications in structural and mechatronic system simulation and test-based engineering processes.

Product presentations and demonstrations in the LMS Booth Area

# Thursday October 3, 2013

			,	
12:00	Registra	tion		

17:10 Transfer to conference dinner at Aeropole

22:30 Back to hotels - Transfer by shuttles

19:30 Conference dinner

12.00	Registration			
	Keynote session			
14:00	Welcome Thierry Olbrechts LMS, A Siemens Business			
14:10	Rolls-Royce View on Current Applications and Future Trends in Simulation Technology Ed Green, Chief of Mechanical Methods Rolls-Royce			
14:40	The trend in the Aerospace testing market: Immediate validation of test results and immediate correlation between simulation/prediction and test Frank Airoldi, Chairman and CEO Intespace			
15:10	Structure Analysis Integration in AIRBUS: Next challenge, Requirements & Business Partnership  Dominique Barthe, Head of Structure Capabilities ISAMI Airbus			
16:10	Dr. Jan Leuridan, Chief Executive Officer & Dirk Van den Berghen, Chief Operation Officer LMS, A Siemens Business			
	David Riemer, VP Aerospace and Defense Strategy Siemens PL			
16:40	Round table Ed Green, Frank Airoldi, Dominique Barthe, Jan Leuridan, Dirk Van den Berghen, David Riemer			

17:45 Cocktail + special events (A380 Flight Simulator, meeting with the first A380 pilot, visit of Concorde and A340)

Friday	/ Octo	ber 4	, 2013
I IIAA	,		,

Conference rooms	Icare I	Icare II	Echo & Foxtrot	Blériot
	Aircraft Mechanical Simulation I	Aircraft Acoustic Testing	Aircraft Structural Analysis & Crack Propagation	Space Systems
08:45	Aircraft Landing Gear Shimmy Westly Davidson Skynetics	New Open Rotor Aircraft Configuration: Wind Tunnel Tests for the Evaluation of Engine Installation Effects on Emitted Noise Prof. Leonardo Lecce University di Napoli	Robust and unified solution to simulate damage and cracks in composite structures with SAMCEF Mecano Serge Maison Le Poec EADS IW	Space System Thermal Simulation Thales Alenia Space
09:10	Modelling of rotor/structural coupling on a rotorcraft François Malburet ENSAM Aix	Developing and using sound source identification methods to improve noise emission interpretation in aeronautics Lucille Lamotte MicrodB	Virtual process chain analysis for risk reduction in the development of manufacturing processes of composite structures Christian Brauner Faser Institut	Evaluation of the 3D XFEM method in the frame of an industrial structure Jonathan Redon EADS Astrium
		Aircraft Acoustic Simulation		
09:35	Claudio Lindquist Embraer	Simulating Sound Transmission Through Aircraft Panels Alexander Peiffer & Stephen Tewes EADS IW	Advanced simulation of the behaviour of laminated composite housing flange: towards virtual testing Benjamin Samson SAFRAN Composites	Use of Monte-Carlo methods for the calculation of radiation view factors in the engine architectures  Jonathan Tsen Snecma (SAFRAN Group)
10:00	Contribution of the kinematic simulation to mechanism design Cédric Magret Snecma (SAFRAN Group)	Prediction of microgravity vibrational environment using the CAE <b>Gérard Borello</b> <b>InterAC</b>	Parametrized modelling of composite substrates assemblies thanks to bolted connections Aurélien Trevert Aircelle (SAFRAN Group)	NASA's Mars rover Curiosity Christophe Ricci Siemens Industry Software France
10:25 Cd	offee break and booth visit			
	Aircraft Testing	System Simulation I	Integrated Aircraft	Space Testing

	Aircraft Testing	System Simulation I	Integrated Aircraft	Space Testing
11:00	Sensors Technologies for Aerospace Acoustic Tests Carmine Salzano & Bob Metz PCB Piezotronics Inc	Integration and Modelling of Flight Control Actuation Systems Patrice Antoinette Aeroconseil	ISAMI Xpress : A Light version of ISAMI dedicated to Quick Checks & Analytical Standalone Stress Analysis René Plate Airbus	Antonio Alvino SERMS
11:25	Implementation of LMS tools for dynamical and acoustical testing on helicopters Yves Estival Eurocopter	Overview of Fuel system simulation Claudio Lindquist Embraer	Global Virtual Thermal Aircraft Julien Cassou Airbus	HOMER project - Early tests introduction in the fast development of a flying mock-up of a lander <b>Frédéric Choin</b> <b>EADS ASTRIUM ST</b>
11:50	Vibration qualification Test of an aircraft piccolo tube using Multiple-Input-Multiple-Output control technology Sonaca	Physical helicopter systems modelization: Eurocopter strategy Paul Barrabes, Thibaut Marger & Nicolas Damiani Eurocopter	Team Center for Simulation: Entreprise Wide Knowledge Sharing and Simulation Data Management Ludovic Allaire Siemens Industry Software France	Pyrotechnics shock simulation Antonio Alvino SERMS
12:15	Mesurements and dynamic analyses at TURBOMECA Arnaud Talon Turbomeca (SAFRAN Group)	ТВС	TBC	TBC

## 12:40 Lunch & booth visit

	Aircraft Mechanism Simulation II	System Simulation II	Correlation	Defense Systems
14:00	Ram Air Turbine, Embraer KC390: Mechanical simulation of the system for any flight conditions Julien Guiraud Hispano Suiza (SAFRAN Group)	Electrical propulsion system Gaël Khimeche EADS Astrium	Dynamic correlation of a space telescope (BEPI COLOMBO MISSION - BELA) Clément Chatel RUAG Space	Using Random Vibration Tests to Replicate Aerodynamic Excitation Philip Daborn AWE
14:25	TBC	Timothée Basson SAFRAN Engineering Services	Harmonic and Random Non linear Vibration Test and Simulation of an aircraft piccolo tube Bruno Bernay Sonaca	Vehicle accelerated fatigue tests design on special tracks using a specific application integrated in Test.Lab platform Pascal Lelan DGA

14:50 Closing drink & booth visit

17:00 Close of conference

# Practical information

## Venue of the conference

Hotel Radisson BLU Toulouse Airport 2, rue Dieudonné Costes 31700 BLAGNAC

T: +33 (0)5 611 618 00 F: +33 (0)5 611 618 01 E-mail: info.toulouse@radissonblu.com www.radissonblu.com/hotel-toulouseairport



www.lmsintl.com/2013-european-aerospace-conference

### Contact

Els Coenen

LMS International
Interleuvenlaan 68,
3001 Leuven [Belgium]
T:+32 16 384 561
M: + 32 476 86 82 60
F:+ 32 16 384 350
els.coenen@lmsintl.com
www.lmsintl.com

