2013 LMS European Vehicle Conference

Smart simulation and testing
for optimized mechatronic system's design

DREAM.
DESIGN. DEVELOP.
DELIGHT.™

October 29-30, 2013
Kempinski Airport Hotel, Munich, Germany

LMS®
A Siemens Business

Tuesday October 29, 2013

09:00 Registration

Keynote session

09:45 Welcome & Introduction
Katrien Wyckaert, Director Automotive Industry Solutions
LMS International

10:00 Major trends and developments in the automotive industry
Prof. Dr. Ferdinand Dudenhöffer, Professor and Director of the Centre for Automotive Research (CAR)
University of Duisburg-Essen

10:35 The changes in customer values drive revolution in energy infrastructure and automobile concepts
Tatsuhide Sakai, Chief Engineer & Project Leader of Next Generation Vehicles
Honda R&D

11:10 Engineering for premium NVH comfort: an overview of current practice and future challenges
Dr. Mihiar Ayoubi, Vice President Acoustics and Vibrations
BMW AG

11:45 Coffee break

12:00 Enabling closed-loop systems driven product development
Dr. Jan Leuridan, Chief Executive Officer & Dirk Van den Berghen, Chief Operation Officer
LMS International

Panel Discussion
Dr. Jan Leuridan, Chief Executive Officer - LMS International
Dirk Van den Berghen, Chief Operations Officer - LMS International
Martien Merks, Senior Vice President Global Sales & Services Strategy - Siemens PLM Software

13:00 Lunch

Conference room	Leonardo II	Ciragan I+II	Leonardo I	Adlon - Gravenbruch	Baltschug
	Vehicle NVH	**Powertrain NVH**	**MBSE**	**Driving Dynamics/ Durability**	**User Corner**
14:30	Latest technologies for platform attribute balancing **Ben Meek/Joris Van Herbruggen** **LMS International**	New Technologies to address current and future trends in Powertrain NVH engineering **Bart Verrecas/Koen De Langhe** **LMS International**	Best practices used by AOEMs & suppliers to facilitate MBSE deployment **David Gagne** **LMS International**	Technology innovation and customer efficiency driving evolutions in durability solutions **Gert Sablon** **LMS International**	
	The unique challenge of balancing refinement and sportiness in a grand tourer **Marco Tarabra** **Bentley**	Vibro-acoustics modeling and validation of fuel rails **Antonio Agresta** **Continental Automotive Italy & University of Pisa**	Torsional Vibro-acoustic Driveline Optimization for Lamborghini Aventador LP700-4 **Giacomo Papotti & Claudio Manzali** **Automobili Lamborghini**	Integrated CAE solution for motorcycle rider comfort evaluation **Marco Pieve** **Piaggio**	
	Accuracy of inverse load identification techniques for transfer path analysis **Theo Geluk** **Daimler & LMS International**	NX CAE - a modern simulation environment **Martin Küssner** **Siemens PLM Software**	Model-based development of system functions for the shift program of a serial hybrid powertrain **Dr. Andreas Nicola** **Voith Turbo**	Accurate prediction of seam weld durability based on the enhanced RxMS approach **Arnold Holler** **LMS International**	

16:00 Exhibition opening & coffee

17:00	Workshop From sound to source in minutes – Introducing LMS SoundBrush	Workshop Coupling a requirements-driven development process with functional system simulation	Workshop Balancing fuel economy with performance, comfort, drivability and NVH	Workshop Reaching higher accuracy on HIL and driving simulators: real-time 3D and 1D models	User Corner Walk in hands-on product demonstrations

18:00 Network drink & exhibition

19:00 Conference dinner

*Agenda is subject to change. Latest version is available on www.lmsintl.com/2013-european-vehicle-conference

Wednesday October 30, 2013

Conference room	Leonardo II	Ciragan I+II	Leonardo I	Adlon - Gravenbruch	Baltschug
	Vehicle Interior Acoustics	**Electric Vehicle Acoustics**	**MBSE Powertrain Development**	**Durability**	**User Corner**
09:00	Use of double layer spherical array for vehicle interior acoustics optimization **Sébastien Paillasseur** **MicroDB**	Acoustic Simulation for Evaluating Loudspeaker Location for Pedestrian Warning Systems in Hybrid and Electric Vehicles **Kai Rissler & Joris Van Herbruggen** **Audi & LMS International**	EV performance evaluation using different HV battery heating approaches **Sebastian Brixner** **Continental Engineering Services GmbH**	Road-map for addressing the automotive engineering challenges in composite development **Dr. Michael Hack** **LMS International**	What's new in Virtual.Lab? **Arnold Holler** **LMS International**
	The importance of selecting the appropriate low frequency inputs for accurate vehicle NVH behaviour assessment **Ben Meek** **LMS International**	CAE-based noise optimization of a Switched Reluctance Motor for automotive propulsion applications **Diederik Brems** **Punch Powertrain**	Synchronization methods of automated gearboxes for electric driven light commercial vehicles **Reinhard Buchberger** **Magna Powertrain**	Analysis of fatigue endurance tests on motorcycle frames by LMS Virtual.Lab Durability **Leonardo Bagnoli** **Ducati & University of Pisa**	What's new in LMS Imagine. Lab? **Anthony Domi** **LMS International**
	TPA application on compressor for car air-conditioner **Tomohiro Sudo** **DENSO**	LMS Virtual.Lab and JMAG coupling for sound pressure calculations **Thiebaud Pfister** **Powersys**	Analysis of the performance and evaluation of the control strategies of a small volumetric rotary expansion device operated with organic fluids **Andrea Baccioli** **University of Pisa**	Simulating composites from injection molding to fatigue assessment with integrated solutions **Dr. Wolfgang Korte & Dr. Michael Hack** **PART Engineering & LMS International**	What's new in LMS Test.Lab? **Dr. Qi An** **LMS International**
10:50	**Coffee break & exhibition**				
	Pass by Noise	**Acoustic Simulation**	**Vehicle Energy Management**	**Chassis Controls**	**User Corner**
11:30	Pass-by noise source contribution analysis by means of ASQ **Bart Verrecas** **PSA Peugeot Citroën & LMS International**	Acoustic simulation techniques for the design of vehicle audio equipment **Koen De Langhe** **Hyundai & LMS International**	Aging modeling for advanced Li-ion battery pack sizing and management for HEV/EV through LMS Imagine.Lab AMESim simulation platform **Martin Petit** **IFP EN**	Integration of system simulation in the attribute testing of truck chassis sub-systems **Vladimir Karabtsev, Farid Ilyasov & Yerlan Akhmetov** **KAMAZ & LMS International**	What's new in LMS Imagine. Lab? **Anthony Domi** **LMS International**
	Interior PBN sound source ranking Mostapha Choukri **Volvo Car Corporation & LMS International**	Vibro acoustic study of a car door with glass system **Fabrizio Becattini** **Magna Closures**	Process automation for energy management **Michael Martin** **Magna Steyr**	CDTire/Real-time: a comfort and durability tire model on Fraunhofer driving simulator **Andrey Gizatullin** **Fraunhofer ITWM**	What's new in Virtual.Lab? **Arnold Holler** **LMS International**
12:40	**Lunch & exhibition**				
	Sub-System NVH Optimization	**MBSE sub-system validation**	**MBSE Development for Off-Highway Powertrain**	**Driving Dynamics**	**User Corner**
14:00	Optimisation of shock absorber structure with using of PolyMax Modal analysis **Dr. Alexander Kruse** **ZF Friedrichshafen**	1D simulation model of an oil lubrication pump an circuit for a sparkt ignition engine with a hydraulic VVA system **Emma Frosina** **FIAT Powertrain & University of Naples Frederico II**	Modeling and simulation of hybrid hydraulic powertrains for off-highway vehicles **Emanuele Mazzi** **Pure Power Control**	Concept modeling with the use of multi-body simulations of suspension system for a fully equipped city bus **Prof. Tadeusz Uhl** **University of Science & Technology AGH & Solaris**	What's new in LMS Test.Lab? **Dr. Qi An** **LMS International**
	Analysis and Optimization of the acoustic emission of a volumetric vane oil pump by means of numerical and experimental methodologies **Raffaele Squarcini** **Pierburg Pump Technology Italy**	Circuital model approach in the design and optimization process of an axial piston pump **Manuel Rigosi** **Casappa**	The role of system simulation in advanced development of energy-efficient powertrain **Lorenzo Serrao** **Dana Spicer**	Innovative hydraulic system control for roll and warp oscillations of a hillclimb race car based on monoshock suspension **Pierluigi Antonini** **ETA**	Walk in hands-on product demonstrations **Dr. Qi An, Arnold Holler, Anthony Domi** **LMS International**
	Root cause investigation of gear axle whine noise on a wheel loader application **Mostapha Choukri** **Volvo Construction Equipment & LMS International**	Indoor testing and advanced simulation of a new electric powertrain for a light truck **Gianpiero Mastinu** **Politecnico Di Milano**	Hydraulic hybrid/power boost for downsized industrial diesel engine **Tobias Winter** **Hatz Diesel**	Integrated 1D-3D systems on advanced driving dynamics performance simulations **Valerio Cibrario** **LMS International**	Walk in hands-on product demonstrations **Dr. Qi An, Arnold Holler, Anthony Domi** **LMS International**
16:10	**Close of conference**				

Practical information

Venue of the conference

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