

# VEHICLE RIDE AND HANDLING: SPECIALIST ENGINEERING FOR AN IMPROVED EXPERIENCE

Institution of  
**MECHANICAL  
ENGINEERS**

Automobile Division  
**Seminar**

**18 October 2017**  
Hotel La Tour, Birmingham

## KEY SPEAKERS INCLUDE:

Diego Minen, Technical Director  
**VI-grade**

Thomas Raste, Head of Competence Center Global  
Chassis & Motion Control  
**Continental**

Max Boerboom, Vehicle Dynamics Engineer  
**Volvo Car Group**

Jan Prins, Technical Specialist Tyre Modelling and CAE  
**Jaguar Land Rover**

Jega Sriskantha, Technical Manager – Multibody  
Simulation  
**Dassault Systemes**

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# VEHICLE RIDE AND HANDLING: SPECIALIST ENGINEERING FOR AN IMPROVED EXPERIENCE

18 October 2017  
Birmingham

**AS THE AUTOMOTIVE INDUSTRY IS DEVELOPING MORE COMPLEX ROAD VEHICLES, MAKE SURE YOU ATTEND THIS SEMINAR TO EXPLORE THE SPECIFIC CHALLENGES IN TYRE, CHASSIS AND VEHICLE DYNAMICS DEVELOPMENT.**

Hear from pioneers in this sector to find out how they are ensuring expectations are met in vehicle control and ride comfort. With the emergence of new systems disrupting the market including Advanced Driver Assistance Systems (ADAS) and Autonomous Vehicles, learn how to design for the vehicle dynamics of the future. Don't miss the opportunity to network with OEMs, academic researchers and Tier 1 suppliers to discuss the current state of the art and future technology roadmap for vehicle ride and handling.

## KEY PROGRAMME HIGHLIGHTS:

- Hear about the use of driving simulators in vehicle dynamics development from **Volvo Car Group**
- **Jaguar Land Rover** share their approach to tyre design techniques to support ride and handling development
- **Continental** discuss their techniques for managing global chassis and motion control
- **Danisi Engineering** share their passive vehicle dynamics considerations for autonomous drive
- Learn about the eDC2 – Hybrid Vehicle Torque Vectoring System from **HORIBA MIRA**

**“An excellent opportunity to catch up with existing contacts and to establish new ones”**

**Nissan Technical Centre Europe**

## ATTEND THIS EVENT TO:

- Hear from leading companies in this field including **Jaguar Land Rover, Volvo Car Group, HORIBA MIRA, Continental** and **Danisi Engineering**
- Discover how to manage disrupter technologies including future ADAS and Autonomous Vehicles
- Take back to your business cost-efficient strategies whilst maintaining a competitive edge
- Network with leading organisations in the sector including OEMs, academic researchers and Tier 1 suppliers

## MEMBER CREDITS:

Mike Blundell, Professor of Vehicle Dynamics and Impact, Centre for Mobility and Transport  
**Coventry University**

Alan Anderson, Vehicle Chief Engineer  
**SAIC Motor UK Technical Centre Limited**

Automobile Division  
**Institution of Mechanical Engineers**

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TERMS AND  
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# PROGRAMME

## WEDNESDAY, 18 OCTOBER 2017

08:30 REGISTRATION AND REFRESHMENTS

**09:00 CHAIR'S OPENING REMARKS**

Mike Blundell, Professor of Vehicle Dynamics and Impact, Centre for Mobility and Transport, Coventry University

### CURRENT DEVELOPMENTS IN RIDE AND HANDLING

**09:10**  
Keynote

**DRIVING SIMULATORS: THE BIGGEST OPPORTUNITY TO INCREASE PERFORMANCE AND REDUCE TIME TO MARKET IN THE AUTOMOTIVE INDUSTRY**

Diego Minen, Technical Director, VI-grade

**09:35 DOES SHEER DRIVING PLEASURE END WITH THE ADVENT OF ADVANCED MOBILITY?**

Aniruddha Reddy, Key Account Manager, Application Specialist, IPG Automotive

### IMPROVING THE PASSENGER EXPERIENCE

**10:00 GLOBAL CHASSIS AND MOTION CONTROL FROM A TIER 1 PERSPECTIVE**

Thomas Raste, Head of Competence Center Global Chassis and Motion Control, Continental

**10:25 QUESTION AND ANSWER SESSION**

10:40 NETWORKING REFRESHMENT BREAK

**11:10 RIDE COMFORT: MODELS FIDELITY AND USEFULNESS**

Maciej Czechowicz, Ride Technical Specialist, Jaguar Land Rover

### TYRE DESIGN TECHNIQUES

**11:35 EDC2 – MIRA'S HYBRID VEHICLE TORQUE VECTORING SYSTEM**

Simon Aldworth, Consultant Engineer, Vehicle Dynamics, HORIBA MIRA

**12:00 THE APPROACH TO TYRE MODELLING TO SUPPORT RIDE AND HANDLING DEVELOPMENT**

Jan Prins, Technical Specialist Tyre Modelling and CAE, Jaguar Land Rover

**12:25 QUESTION AND ANSWER SESSION**

12:40 NETWORKING LUNCH

**13:40 TYRES AND ROADS: PREDICTING FRICTION**

Patrick Gruber, Senior Lecturer, University of Surrey

**14:05 ADVANCED THERMO-FRICTIONAL TYRE MODELLING FOR VEHICLE DYNAMICS**

Georgios Mavros, Senior Lecturer, Intelligent Mobility and Vehicle Dynamics, Loughborough University

**14:30 LATEST ADVANCES IN PHYSICAL TYRE MODELLING FOR REAL-TIME SIMULATIONS**

Flavio Farroni, Co-Founder and CEO, MegaRide S.r.l.

### VEHICLE DYNAMICS FOR FUTURE VEHICLES

**14:55 THE ROLE OF MULTI-BODY DYNAMICS IN VEHICLE DYNAMICS ANALYSIS: REAL TIME SIMULATION**

Jega Sriskantha, Technical Manager – Multibody Simulation, Dassault Systemes

**15:20 QUESTION AND ANSWER SESSION**

15:40 NETWORKING REFRESHMENT BREAK

**16:10 AUTONOMOUS VEHICLE AGILE MANOEUVERING**

Manuel Acosta, PhD Student and Marie Curie Fellow, Interdisciplinary Training Network in Multi-Actuated Ground Vehicles (ITEAM), Coventry University

**16:35 DRIVING SIMULATORS IN VEHICLE DYNAMICS DEVELOPMENT**

Max Boerboom, Vehicle Dynamics Engineer, Volvo Car Group

**17:00 PASSIVE VEHICLE DYNAMICS CONSIDERATIONS FOR AUTONOMOUS DRIVE**

Tim Wright, Vehicle Dynamics Engineer, Danisi Engineering S.r.l.

**17:25 QUESTION AND ANSWER SESSION**

**17:40 CHAIR'S CLOSING REMARKS**

**17:45 END OF SEMINAR**

For the most up-to-date and detailed programme for the event, please visit [www.imeche.org/vehiclerideandhandling](http://www.imeche.org/vehiclerideandhandling)

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

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### FEES AND CHARGES

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Seminar	Early Bird Rate Until 1 September 2017	Standard Rate
Member, Institution of Mechanical Engineers/Supporting Organisation	£270 + VAT = £324	£320 + VAT = £384
Non-member	£410 + VAT = £492	£480 + VAT = £576
Student/Retired	£90 + VAT = £108	£100 + VAT = £120

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**3** Phone:  
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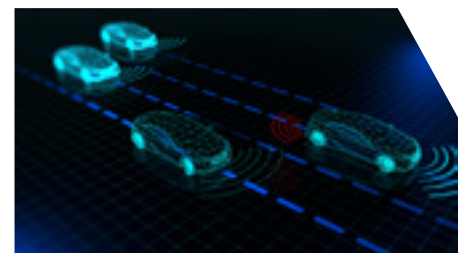


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