SCHEDULE


Tuesday 27th March 2012

8:30am - 9:30am  REGISTRATION AND COFFEE

9:30am  OPENING OF THE SYMPOSIUM

Welcome by Professor Michael Farthing - Vice Chancellor of the University of Sussex

Welcome by Professor Bernard Weiss - Head of the School of Engineering and Informatics

9:45am – 10:30am  KEYNOTE SPEAKER  Hans-Jürgen Büchler (Manager NVH - Ride Comfort & Drivetrain Vibration - Panamera & Cayenne, Porsche AG).

‘Driving - comfort - simulation of the Porsche Panamera diesel as an example of how "Porsche Intelligent Performance" is realized in the Porsche Development Process’.

10:30am  - 11:00 am  COFFEE BREAK

11:00am - 11:30am  CSP03  DYNAMICAL ENERGY ANALYSIS FOR BUILT-UP STRUCTURES AND INTERFACE PROBLEMS.
D.J. Chappell, G. Tanner, D. Maksimov, N. Sondergaard, J. Renno and B. R. Mace. (School of Mathematical Sciences, University of Nottingham, University Park, Nottingham NG7-2RD, UK;  InuTech GmbH, Fürther Strasse 212, 90429, Nuremberg, Germany;  and  The Institute of Sound and Vibration Research, University Road, Southampton, SO171BJ, UK).

11:30am - 12:00am  CSP21  MID-FREQUENCY MODELLING OF A CAR FLOOR STRUCTURE WITH HYBRID METHOD AND SEA.
G. Xie, L. Dunne, A. Seçgin, L. Zoghaib, and J.F. Dunne. (CDH AG, Herbolzheim, Germany, 79336;  and  The School of Engineering and Design, University of Sussex, UK, BN19QT).

12:00am - 12:30pm  CSP19  NUMERICAL TREATMENT OF INTERFACE PROBLEMS FOR COMPLEX VIBRO-ACOUSTIC STRUCTURES.
N. Sondergaard, D.J. Chappell, and G. Tanner. (InuTech GmbH, Nurnberg, Germany;  and  School of Mathematical Sciences, University of Nottingham, UK).

12:30pm - 1:00pm  CSP18  STATISTICAL ENERGY ANALYSIS OF AN UNCERTAIN VEHICLE FLOOR USING MODAL-BASED APPROACHES.
A. Seçgin, L. Zoghaib, G. Xie, L. Dunne, and J.F. Dunne. (The School of Engineering and Informatics, University of Sussex, BN1 9QT, UK;  and CDH AG, 79336, Herbolzheim, Germany).

1:00pm – 2:00pm  LUNCH
Tuesday 27th March 2012 (pm)

Technical Session T2: Advanced Low Frequency Statistical Uncertainty Analysis  
Session Chair: Gregor Tanner

2:00pm - 2:30pm  CSP01  STOCHASTIC REDUCED-ORDER MODEL FOR DYNAMICAL STRUCTURES HAVING A MODAL DENSITY IN THE LOW FREQUENCY RANGE. A. Arnoux, A. Batou, C. Soize, and L. Gagliardini. (Université Paris-Est, Laboratoire Modélisation et Simulation Multi-Echelle, MSME UMR 8208 CNRS, 5 Boulevard Descartes, 77454 Marne-la-Vallée, France; and PSA Peugeot Citroën, DTI, Centre Technique de Vélizy A. Route de Gisy, 78140 Vélizy Villacoublay, France).

2:30pm - 3:00pm  CSP10  ANALYSIS OF THE EXACT STATISTICS OF UNCERTAIN STRUCTURAL DYNAMIC SYSTEMS: “WHAT DOES A RANDOM COMPONENT REALLY CHANGE?” C. Lecomte. (Institute of Sound and Vibration Research, Southampton Statistical Sciences Research Institute (S3RI), University Road, Highfield, Southampton SO171BJ, UK).

3:00pm - 3:30pm  COFFEE BREAK

Technical Session T3: Stochastic Whole-Vehicle-Body NVH Design and Full-Scale Measurement  
Session Chair: Peter Göransson

3:30pm - 4:00pm  CSP06  AN INDUSTRIAL IMPLEMENTATION OF NON-PARAMETRIC STOCHASTIC MODELLING OF VEHICLE VIBROACOUSTIC RESPONSE. A. Jund, B. Guillaume, and L. Gagliardini. (PSA Peugeot Citroën, Research and Development division, Centre technique de Belchamp, 25420 Voujeaucourt, France; and PSA Peugeot Citroën, Research and Development division, Zone aéronautique Louis Bréguet, 78140 Vélizy-Villacoublay, France; and PSA Peugeot Citroën, Research and Development division, Route de Gisy, 78140 Vélizy-Villacoublay, France).

4:00pm - 4:30pm  CSP16  ACCURACY OF CAE PREDICTIONS OF NVH CHARACTERISTICS OF A VEHICLE BODY IN VIEW OF THE DISPERSION IN TEST. A. Pietrzyk. (Volvo Car Corporation, Noise & Vibration Center, 405 31 Gothenburg, Sweden).

7:00pm  THE SYMPOSIUM DINNER  
Hilton Brighton Metropole Hotel (Ambassador Room), Brighton Seafront.

Wednesday 28th March 2012

8:30am - 9:30am  LATE REGISTRATION AND COFFEE

Technical Session W1: Advanced Deterministic Modelling and Analysis Methods  
Session Chair: Neil Ferguson

9:30am - 10:00am  CSP05  HIGH-ORDER/HP–ADAPTIVE DISCONTINUOUS GALERKIN FINITE ELEMENT METHODS FOR ACOUSTIC PROBLEMS. S. Giani. (University of Nottingham, School of Mathematical Sciences, Nottingham NG7 2RD, UK).


10:30am - 11:00am  CSP22  A DYNAMIC FINITE ELEMENT MODEL OF THE SEATED OCCUPANT FOR RIDE COMFORT ANALYSIS. G. Zheng, Y. Qiu, and M. J. Griffin. (Human Factors Research Unit, Institute of Sound and Vibration Research, University of Southampton, Southampton SO17 1BJ UK).

11:00am - 11:30 am  COFFEE BREAK
Wednesday 28th March 2012 (Continued)

**Technical Session W2: Modelling and Analysis of Porous Media and Structural Damping**

*Session Chair: Bert Van Genechten*

**11:30am - 12:00am CSP12** VIBROACOUSTIC CHARACTERISTICS OF DAMPED LAMINATED SHELLS AND PANELS.
E. Manconi, and B. R. Mace. (Department of Industrial Engineering, University of Parma, Italy; and The Institute of Sound and Vibration Research, University of Southampton, UK).

**12:00am - 12:30pm CSP14** ON LINEAR MODELLING OF INTERFACE DAMPING IN A COMPLEX VIBRATING STRUCTURE.
R. V. Nadampalli, K. Dovstam, P. Göransson, and C. Glandier. (DAIMLER AG 71059 Sindelfingen, Germany; and MWL, Department of Aeronautical and Vehicle Engineering KTH Royal Institute of Technology 10044 Stockholm, Sweden).

**12:30pm - 1:00pm CSP17** AN ENHANCED MODAL-BASED REDUCTION OF 3D POROUS MATERIALS MODELLING FOR EFFICIENT COMPUTATION OF STRUCTURAL-AcouSTIC FINITE ELEMENT APPLICATIONS.
R. Rumpler, J.-F. Deü, and P. Göransson. (LMSSC, Conservatoire National des Arts et Métiers 292 rue Saint-Martin, case 2D6R10, 75141 Paris Cedex 03, France; and MWL, Department of Aeronautical and Vehicle Engineering Royal Institute of Technology (KTH), SE-100 44 Stockholm, Sweden).

**1:00pm – 2:00pm LUNCH**

Wednesday 28th March 2012 (pm)

**Technical Session W3: Vibro-Acoustic Control, Optimisation, and Ride Dynamics**

*Session Chair: Yevgen Petrov*

**2:00pm - 2:30pm CSP07** ACTIVE VIBRATION CONTROLLER DESIGN TO IMPROVE SOUND PRESSURE LEVEL INSIDE THE PASSENGER CABIN.
S. Külah, U. Arıdoğan, and İ. Başdoğan. (Mechanical Engineering Department, Koç University, Istanbul, 34450 Turkey).

**2:30pm - 3:00pm CSP08** NUMERICAL MODELLING TECHNIQUES TO OPTIMISE AUTOMOTIVE-TYPE PANELS FOR REDUCED SOUND RADIATION.
G. Kumar, S.J. Walsh and V.V. Krylov. (Department of Aeronautical and Automotive Engineering, Loughborough University, Leicestershire, UK, LE11 3TU).

**3:00pm - 3:30pm CSP15** THE EFFECT OF CUBIC DAMPING IN AN AUTOMOTIVE VEHICLE SUSPENSION MODEL.
N. Panananda, N.S. Ferguson, and T.P. Waters. (Institute of Sound and Vibration Research, University of Southampton, Southampton SO17 1BJ, UK).

**3:30pm END OF SYMPOSIUM**

**COFFEE OR IMMEDIATE DEPARTURE**