Tuesday December 5th

17:00	18:00	Welcome of participants	
18:00	20:00		Visit of Le Mans circuit
20:00	21:00		Dinner

Wednesday December 6th

08:00	08:30	Welcome of participants		
08:30	09:00	Opening ceremony		
Session: Characterisation of Porous Materials				
09:00	**09:45**	**Keynote Lecture**	Photoacoustic determination of mechanical properties at microstructure level	CHRIST GLORIEUX (KUL, Belgium)
09:45	10:05	Charac 1	26 - Laboratory and In Situ Sound Absorption Measurement under a Synthetized Diffuse Acoustic Field: a Case Study on Five Materials	O. ROBIN, C.K. AMEDIN, A. BERRY, N. ATALLA, O. DOUTRES, F. SGARD
10:05	10:25	Charac 2	17 - Vibration damping properties of porous materials	L. ROULEAU, A. GUINAULT, J.-F. DEU
10:25	*10:55*	*Coffee break*		
10:55	11:15	Charac 3	12 - Micro- to Macro-scale Investigations of Anisotropy and Local Boundary Stiffness Variations in Open-cell Lightweight Foams	P. GORANSSON, J. CUENCA, E. LUNDBERG, L. MANZARI
11:15	11:35	Charac 4	62 - SLaTCoW (Spatial LAplace Transform for COmplex Wavenumber recovery) method for frequency / complex wavenumber dispersion relation recovery	A. GESLAIN, L. SCHWAN, J.-P. GROBY, V. ROMERO-GARCIA, S. RAETZ, A. DUCLOS, N. BOECHLER
11:35	11:55	Charac 5	35 - Elastic characterization of a porous layer in a sandwich structure	L. LEI, J.D. CHAZOT, N. DAUCHEZ
11:55	12:15	Charac 6	63 - Round Robin test on elastic properties of poro- and viscoelastic materials for vibro-acoustic applications	P. BONFIGLIO, et al.
12:15	*13:30*	*Lunch*		
13:30	**13:50**	**Poster**	**10(charac), 48(charac), 68(charac), 9(models)**	
13:50	14:10	Charac 7	60 - Characterization of poroelastic materials through interface scattering and propagation models	S. BOURGUIGNON, N. BOUHLEL, A. DUCLOS, J.P. GROBY
14:10	14:30	Charac 8	64 - Characterizing rigid frame porous materials with deterministic and statistical inversion	M. NISKANEN, J.P. GROBY, A. DUCLOS, O. DAZEL, J.C. LE ROUX, N. POULAIN, T. HUTTUNEN, T. LÄHIVAARA
14:30	14:50	Charac 9	39 - Efficient simulation of dispersion envelope of poro-elastic media	J. RODENAS, F. CHEVILLOTTE, F.-X. BÉCOT, L. JAOUEN
14:50	*15:20*	*Coffee break*		
15:20	**15:40**	**Poster**	**30(models), 32(models), 70(models), 22(materials)**	



Session: Flow in presence of porous materials

15:40	**16:25**	**Keynote Lecture**	Boundary conditions modeling acoustic linings in flow	EDWARD BRAMBLEY (Warwick University, UK)
16:25	16:45	Flow 1	28 - Instability over a Porous Line in a Duct with Flow	Y. AURÉGAN
16:45	17:05	Flow 2	41 - Analysis of the non-linear behavior of micro-perforated plates using lattice Boltzmann method	F. CHEVILLOTTE, P. MARCHNER, M. MARTINEZ, R. RONCEN, F. SIMON
17:05	17:25	Flow 3	53 - Transmission losses of a turbofan inlet duct lined with porous materials	E. PERREY-DEBAIN, C. CHAN, J.-M. VILLE, B. POIRIER
17:25	17:45	Flow 4	65 - Properties of bulk reacting absorbers subject to flow and temperature boundary layers	S. BOIJ, A. FARM, R. GLAV
17:45	18:05	Flow 5	66 - Acoustic propagation in a circular pipe with periodic inclusions	J. GOLLIARD, Y. AUREGAN
18:30	20:00		Visit of the Old City / Reception at the City hall	

Thursday December 7th

Session: Physical models				
08:30	**09:15**	**Keynote Lecture**	Thermacoustics: an overview	GAELLE POIGNAND (Le Mans Université, France)
09:15	**09:40**	**Poster**	**44(materials), 57(materials), 58(materials), 11(appli), 19(appli)**	
09:40	10:00	Models 1	47 - Advances in the microstructure and transport properties of random fibrous materials	C. PERROT, R. PANNETON, J. GUILLEMINOT, V. MONCHIET, P. LEROY, G. JACQUS, M. HE, H.-T. LUU
10:00	10:20	Models 2	29 - Reflection and transmission by a double porosity layer obeying Berryman-Wang theory	F.Z. KACHKOUCH, H. FRANKLIN, A. TINEL, A. ALEM, H. WANG
10:20	*10:50*	*Coffee break*		
10:50	**11:10**	**Poster**	**25(appli), 43(appli), 31(comput), 55(comput)**	
11:10	11:30	Models 3	21 - Acoustic Dissipation by Films: a Step Towards Liquid Foams and Membrane-Type Metamaterials Modelling	C. GAULON, J. PIERRE, F. ELIAS, V. LEROY, C. DEREC
11:30	11:50	Models 4	42 - Acoustic wave propagation in fractal porous material	Z.E.A. FELLAH, A. BERBICHE, M. FELLAH, E. OGAM, C. DEPOLLIER
11:50	12:10	Models 5	46 - New topics on the Nonlocal Maxwellian theory of sound propagation: "External Force - External Current" acoustic-electromagnetic analogy, and quasi-analytical validations of the action-response homogenization procedures.	N. NEMATI, D. LAFARGE
12:10	*13:30*	*Lunch*		

Session: Metamaterials / New materials

13:30	**14:15**	**Keynote Lecture**	Optimal Sound-Absorbing Structures	PING SHENG (The Hong Kong Univ. of Sci. & Tech.)
14:15	14:35	Materials 1	13 - Microstructures for lowering the frequency of the quarter wavelength resonance of a hard-backed rigid-porous layer	K. ATTENBOROUGH
14:35	14:55	Materials 2	15 - 3D printed membrane-type acoustic metamaterials for small- scale applications	C. CASARINI, B. TILLER, J. WINDMILL, J. JACKSON
14:55	15:15	Materials 3	34 - Influence of activation processes on the of activated carbon felts microstructure and impact on the acoustic performances	H. KARPINSKI, O. UMNOVA, R. VENEGAS CASTILLO, J. HARGREAVES, A. NAHIL, S. LEHMANN FERNANDEZ
15:15	15:35	Materials 4	40 - Straw-inspired Metamaterial for Sound Absorption	W. HUANG, L. SCHWAN, V. ROMERO GARCIA, J.-M. GÉNEVAUX, J.P. GROBY
15:35	*16:05*	*Coffee break*		
16:05	16:25	Materials 5	45 - Metaporous Layers for Broadband Sound Absorption using Multiple Slow Waves	J.S. LEE, J. YANG, Y.Y. KIM
16:25	16:45	Materials 6	49 - Acoustic performance of a bubble meta-screen	G.S. SHARMA, M. TOYODA, N. KESSISSOGLOU
16:45	17:05	Materials 7	50 - Propagation of low frequency sound through a metaporous layer of subwavelength thickness: Homogenization with numerical validation	L. SCHWAN, J.P. GROBY, O. UMNOVA
17:05	17:25	Materials 8	37 - Perfect absorption in acoustic metamaterials based on open lossy resonant building blocks	V. ROMERO GARCIA, N. JIMÉNEZ, V. PAGNEUX, J.P. GROBY
17:25	17:45	Materials 9	56 - Perfect and broadband sound absorption based in rainbow trapping phenomena for transmission problems	N. JIMÉNEZ, V. ROMERO GARCIA, J.P. GROBY
19:00	23:30		Visit of Abbaye Royale de l'Epau and Gala Dinner	



Friday December 8th

Session: Industrial applications				
08:45	**09:30**	**Keynote Lecture**	Guided waves computation with porous media	BENOIT NENNIG (Supmeca, France)
09:30	09:50	Applications 1	18 - Application and Simulation of Microperforated Panels in a complex Sound Field	S. FLOSS, M. KALTENBACHER
09:50	10:10	Applications 2	20 - Assessment of the Structure Borne Insertion Loss performance of interior vehicle treatments	T. DELPERO, R. D'AMICO, R. STELZER, T. COURTOIS
10:10	10:30	Applications 3	24 - Assessing Simplified Models for Noise Control Treatments: Discussion and Application to a Trimmed Car Floor	L. ALIMONTI, A. CAILLET, W. VAN HAL
10:30	*10:50*	*Coffee break*		
10:50	11:10	Applications 4	51 - Upgrading hybrid stiff insulators performance through tailored solid inclusions localization: the Polyfoam and Ecofelt solutions	A. DUVAL, G. CRIGNON, M. GORET, D. LEMAIRE
11:10	11:30	Applications 5	54 - Porous materials in consumer products, the Dyson approach	I. PEREZ PABLOS
11:30	11:50	Applications 6	67 - Numerical modelling of the acoustics of low density fibrous media having a distribution of fiber sizes	T. HERDTLE, Y. XUE, J. S. BOLTON
11:50	12:10	Applications 7	38 - Microstructure morphological and acoustical macro-behavior analysis of high density filled foam	M.T. HOANG, V. MARCEL, J.-F. RONDEAU, A. CURIEN, L. DEJAEGER
12:10	*13:10*	*Lunch*		



Session: Computational methods				
13:10	**13:55**	**Keynote Lecture**	A sub-domain system approach based on symmetric variational coupling of Boundary and Finite Element Methods : application to virtual prototyping of trimmed vehicles	MOHAMED-ALI HAMDI (UTC, ESI Group, France)
13:55	14:15	Computation 1	14 -The shifted cell operator technique applied to equivalent fluids models for the computation of dispersion diagrams of periodic porous	D. MAGLIACANO, M. OUISSE, A. KHELIF, S. DE ROSA, F. FRANCO
14:15	14:35	Computation 2	16 - Acoustic modeling of filters and counter-current exchangers using a double equivalent fluid homogenization approach	G. LIELENS, A. TALBOT
14:35	14:55	Computation 3	23 - Efficient simulation of vibro-acoustic problems with poro-elastic damping using a Matrix-free Model Order Reduction scheme	S. JONCKHEERE, O. ATAK, H. BÉRIOT, W. DESMET
14:55	*15:15*	*Coffee break*		
15:15	15:35	Computation 4	36 - Acoustic wave transmission conditions on perforated rigid, or elastic plates - homogenization and computing	E. ROHAN, V. LUKES
15:35	15:55	Computation 5	59 - Adaptive High-order FEM for the mixed {U,p} poro-elastics equations	H. BÉRIOT, O. DAZEL, G. GABARD, E. DECKERS
15:55	16:15	Computation 6	33 - The link between the plane-wave absorption coefficient and the sound field due to a point source	R. DRAGONETTI, M. NAPOLITANO, R. ROMANO
16:15	16:35	Computation 7	61 - Fibrous Material Microstructure Design for Optimal Damping Performance	J.S. BOLTON, Y. XUE
16:35	*16:55*	*Closing Ceremony*		
19:00	23:30		Dinner at "Café Rossi"	



Poster session: Characterisation of Porous Materials

Wed 6th Dec 13:30-13:50	10 - Mechanical Characterisation of Isotransverse Acoustic Foams	G. YAN, X. GUO, B. BROUARD, S. SAHRAOUI
Wed 6th Dec 13:30-13:50	48 - Characterisation of inhomogeneous ducts and porous media and extrapolation to experimentally unavailable thermal conditions	J. CUENCA, L. DE RYCK, A. PERDIGON,T. LE SCOLAN
Wed 6th Dec 13:30-13:50	68 - Bayesian characterization of poroelastic materials saturated with heavy fluid	M. NISKANEN, A. DUCLOS, O. DAZEL, J-P. GROBY, T. HUTTUNEN, T. LÄHIVAARA

Poster session: Physical models

Wed 6th Dec 13:30-13:50	9 - Fractional derivatives model to predict high frequency moduli of acoustic foams	X. GUO, G. YAN, L. BENYAHIA, S. SAHRAOUI
Wed 6th Dec 15:20-15:40	30 - Active Membrane Noise Absorber in Duct Based on Fuzzy Model Control Strategy	R. MOEZZI
Wed 6th Dec 15:20-15:40	32 - Johnson-Champoux-Allard model in thermoacoustics	R. DRAGONETTI, M. NAPOLITANO, R. ROMANO
Wed 6th Dec 15:20-15:40	70 - Tunable isolation band gaps in one-dimensional active piezoelectric sonic crystals	Q. ZHANG, O. UMNOVA, Y. LAN

Poster session: Metamaterials / New materials

Wed 6th Dec 15:20-15:40	22 - Acoustical and thermal joint approach for optimization of vegetal wools used in buildings	C. PIEGAY, P. GLÉ, E. GOURDON, E. GOURLAY, S. MARCEAU
Wed 7th Dec 09:15-09:40	44 - Evaluating Efficiency of SoundProof Paint Using Microporous Pigments	A. SHIMPI, A. SHIMPI
Wed 7th Dec 09:15-09:40	57 - Interaction of high amplitude waves with acoustic metamaterials	D. BROOKE
Wed 7th Dec 09:15-09:40	58 - On the conditions for perfect absorption of sound by rigidly-backed layers of porous materials	N. JIMENEZ, V. ROMERO GARCIA, J-P. GROBY

Session: Industrial applications

Wed 7th Dec 09:15-09:40	11 - Development of an efficient capture and amplification system of sound waves	K. GADONNA, Z. ZHAO, B. WILLIATTE, A. SENOUCI
Wed 7th Dec 09:15-09:40	19 - Nanofibrous electrospun membranes for acoustic applications	A. HURREL, K. HOROSHENKOV, M. PELEGRINIS
Wed 7th Dec 10:50-11:10	25 - Experimental research of acoustic louver sound insulation	T. ASTRAUSKAS, T. VILNISKIS, O. KHRYSTOSLAVENKO, T. JANUSEVICIUS, R. GRUBLIAUSKAS
Wed 7th Dec 10:50-11:10	43 - Cross-section based Analysis of Porous Metamaterial lined Mufflers	N. SHARMA, O. UMNOVA, A. MOORHOUSE

Session: Computational methods

Wed 7th Dec 10:50-11:10	31 - Modelling of poroelastic media with localised mass inclusions	T. ZIELINSKI, L. JANKOWSKI, K. OPIELA, E. DECKERS
Wed 7th Dec 10:50-11:10	55 - Acoustic response of anisotropic multilayered structures: sub-layering of the anisotropic poroelastic core and influence of the material natural axis orientation.	J. P. PARRA MARTINEZ, J. CUENCA, P. GORANSSON, O. DAZEL

