

Resonance Conference - Tuesday 11th				
09:00	Welcome Ceremony			
09:40	Keynote Lecture by Julien Caillet, Acoustics – ETGV, Airbus Helicopters - Chair : Frank Simon <i>eVTOL noise acceptance : a short overview from the perspective of a helicopter manufacturer</i>			
10:20	Coffee break			
	JISFA		SURVISHNO	
	<b>Aircraft Exterior Noise</b> Chair: Frank Simon	<b>Model &amp; System identification</b> Chair: Simon Chesné	<b>Fleet Monitoring</b> Chair: Konstantinos Gryllias	<b>Signal Processing</b> Chair: Gianluca D'Elia
10:40	Engine noise: panorama of future architectures Moal Stefan	Comparative study of the first bending modes of a cantilever beam from a video measurement Touzet Jimmy, Alata Olivier, Bonnardot Frédéric, Chesne Simon, André Hugo	Feature extraction in Non-stationary Conditions Achilleos Achilleas, Leclère Quentin, Antoni Jérôme	Towards a self-evaluation of the reconstruction of the instantaneous phase of a vibration signal Karkar sami, Had anas, Haut bertrand, Touzet Jimmy, Andre Hugo
11:00	Combustion noise and engine noise: current computational capabilities and fuel expected issues Gicquel Laurent	Harmonic modal analysis using hydroelectric runner steady-state strain gauge measurements Morin Nicolas, Dollon Quentin, Antoni Jérôme, Tahan Souheil-Antoine, Monette Christine, Gagnon Martin	Effective Identification of Cyclic Excitation and Resonance in Nonstationary Gearbox Vibration Monitoring Ahani Mojtaba, Bourdon Adeline, Remond Didier	Time and angle analysis of Instantaneous Angular Speed signal: impact on average velocity and order spectrums Burel Arthur, Bourdon Adeline, Remond Didier
11:20		Identification of the Payne effect in a viscoelastic material coupling Bayesian identification and Digital Twin Jaboviste Kévin, Teloli Rafael, Sadoulet-Reboul Emeline, Chevallier Gaël	Automated domain adaptation for bearings fault detection and classification Karkafi Fadi, Raad Amani, Abboud Dany, Marnissi Yosra, Doquet Guillaume, El Badaoui Mohammed	Enhancing the Performance of the Multi-Order Probabilistic Approach in Angular Speed Estimation through Adaptive Window Selection Protopapadakis georgios, Peeters Cédric, Leclère Quentin, Helsen Jan
11:40	Reverse problems and Analytical Sensitivity analysis for landing gear noise calibration and prediction Hanappier Paul	Parametric modal testing using slow but continuous variation of operating conditions. Illustration on a contact bench Malacrida Alves Guilherme, Balmes Etienne, Martin Guillaume, Chancelier Thierry, Kassa Enzo	Results on experimental data analysis of independent linear motors in non-stationary conditions Jabbar Abdul, Cocconcilli Marco, D'elia Gianluca, Strozzi Matteo, Rubini Riccardo	Exploring the potential of sparsity-based spectral estimation for vibration analysis Peeters Cédric, Jakobsson Andreas, Antoni Jérôme, Helsen Jan
12:00	Airframe noise Feury Vincent	Estimation of the piezoelectric factor in nonlinear transducers Peyrouse Floriane, Michon Guilhem, Chesne Simon, Jean Frederic, Aubry Alice	Performance study of DTW-based spike measurement anomaly detection in sensors on real world tests Cornelis Bram, Deuschle Federico, Gryllias Konstantinos	Design considerations for smartphone camera-based rotational speed measurement Verwimp Toby, Mauricio Alexandre, Gryllias Konstantinos
12:20	After session discussion and Q&A	Design of a Resonant Plate for Pyroshock Testing based on Shape and Size Heuristic Optimization Viale Luca, Daga Alessandro Paolo, Garibaldi Luigi	Investigating dataset shift detection methods in an automotive booming noise classification setting Kunte Deepti, Cornelis Bram, Colangeli Claudio, Gryllias Konstantinos	Extraction of the acoustic modal content of a turbofan engine in non stationary conditions using order analysis Miranda-Fuentes johann, Pereira antonio, Leclère Quentin, Antoni Jérôme
12:40	Lunch break			
	JISFA		SURVISHNO	
	<b>Enviromental Noise and Perceptive approaches - chair: Adrien Pelat</b>	<b>Dynamic modeling 1</b> Chair: Morvan Ouisse	<b>Fault Diagnostics &amp; prognostics 1</b> Chair: Hugo André	<b>Condition Monitoring 1</b> Chair: Jérôme Antoni
14:00	Applications of experimental processes to large set up (videos)	A model-based approach for the NVH performance improvement of Soft Close Actuators for automotive applications Natali Caterina, Manfredini Giacomo, Scarfone Vincenzo, Becattini Fabrizio, Dalpiaz giorgio, Mucchi Emiliano	A federated learning approach for rolling bearing fault diagnosis on data sources with imbalanced class distribution De Fabritiis Fabrizio, Gryllias Konstantinos	Acoustic Monitoring of Rolling Element Bearings using a Sparse Microphone Array, Wu Xian, Denayer Hervé, Gryllias Konstantinos
14:20	Short term annoyance due to aircraft flyovers Lavandier Catherine	Optimization of the Energy Input and Output Parameters for Pyroshock Testing Daga Alessandro Paolo, Viale Luca, Fasana Alessandro	Cyclic monitoring of the Remaining Useful Life RUL for the Bearing Fault prognosis Benyagoub Abderrahmane	Automatic Processing of Air Gap Monitoring Signals in Hydro-Generators Faure-Giovagnoli Pierre, Turbidi Christophe, Scuturici Vasile-Marian
14:40	Long term annoyance and its impact on health Lavandier Catherine	Numerical analysis of the dynamic behavior of rotor shafts in permanent magnet synchronous machines Poupon Thomas, Abdelnour Nicolas, Givois Arthur, Lanfranchi Vincent, Chazot Jean-Daniel, Hamiti tabar, Caule Patrice	Modelling and diagnosis of a crack of a bearing inner ring Combet Francois, Thomas Xavier	Bearing diagnostics and speed estimation via smartphone standalone data Mauricio Alexandre, Verwimp Toby, Gryllias Konstantinos
15:00	Uncomfort due to noise and vibration in aircrafts Parizet Etienne	Control of an acoustic mode by a digitally created Nonlinear Electroacoustic Absorber at low excitation levels: Analytical and Experimental results Morell Maxime, Collet manuel, Gourdon Emmanuel, Ture Savadkoochi Alireza	Study of bearing fault detectability on a rotating machine by vibro-acoustic characterisation as a function of a noisy surrounding machine Attal Emmanuel, Ossonemane Asseko Elga, Sekko Edgar, Sbai Nadia, Ravier Philippe	Bearing diagnostics based on a Spectral combination of Hjorth's parameters D'elia Gianluca, Cocconcilli Marco, Daga alessandro Paolo, Garibaldi Luigi, Rubini Riccardo
15:20	Aircraft noise certification: evolutions & trends Moal Stefan	Exploring the Impact of Defect Geometry on Bearing Dynamic Behavior Using Spall and Indentation Models Schwarz Ori, Bortman Jacob, Klein Renata	On the detection of rolling contact fatigue in large bearings using roller embedded sensors Baggerohr Stephan	Data-driven Interpretable Optimized Weights Derived from A Sparsity Measure Framework and Their Applications in Machine Condition Monitoring Bingchang Hou, Wang Dong, Peng Zhike
15:40	After session discussion and Q&A	Unknown load torque estimation on rotary drivetrains with exploitation of angular periodicity in an extended Kalman filter Van der Veken Thijs, Croes Jan, Janssens Dennis, Naets Frank		Information Fusion of Infrared Images and Acoustic Signals for Bearing Fault Diagnosis of Rotating Machinery Siami Mohammad, Shiri Hamid, Barszcz Tomasz, Wodecki jacek, Zimroz Radoslaw
16:00	Coffee break			
16:20	Exhibitor session			
17:00	Round table - IROQUA - chair: Frank Simon			
18:00	Visite ISAE			

Resonance Conference - Wednesday 12th				
09:20	<b>Keynote Lecture by Wenyi Wang - Aerospace Division, Defence Science and Technology Group, Australia - chair: Jérôme Antoni</b> <i>Tackling a challenging problem: diagnosis of helicopter planetary gear rim crack – with a historical reflection of DSTG's gearbox diagnostics work</i>			
10:00	Start-Up session			
10:20	Coffee break			
	JISFA		SURVISHNO	
	<b>Aircraft Interior Noise</b> <b>Chair: Frank Simon</b>	<b>Dynamic modeling 2</b> <b>Chair: Emeline Sadoulet-Reboul</b>	<b>Fault Diagnostics &amp; prognostics 2</b> <b>Chair: Renata Klein</b>	<b>Condition Monitoring 2</b> <b>Chair: Marco Cocconcelli</b>
10:40	<i>Main Gearbox noise in helicopter cabins and dedicated noise control treatments</i> <b>Caillet Julien</b>	<i>Non-Linear data-driven model for a solar tracker aeroelastic simulation</i> Vedovelli Matteo, Castellani Francesco, Becchetti Matteo	<i>Impact of low inner ring waviness orders on Hybrid ball bearing under high speeds</i> <b>Berrada Salma</b> , Serra roger, Van Dalen Piet, Chastagner Celine	<i>Non-Gaussian noise in rotating machines: sources, impact to local damage detection procedures and possible solutions</i> <b>Zimroz Radoslaw</b> , Antoni Jérôme, Barszcz Tomasz, Wylomanska Agnieszka, Wodecki Jacek, Hebda-Sobkowicz Justyna, Michalak Anna
11:00	<i>Modeling the wall pressure of a turbulent flow to predict the noise radiated by a structure</i> Morilhat Sylvain, Simon Frank, Chedevergne François, Auipoix Bertrand	<i>Phase transitions in a resonating free-piston engine generator</i> <b>Dunne Julian</b>	<i>Orthogonal nonnegative matrix factorization as informative frequency band selector</i> <b>Gabor Mateusz</b> , Zdunek rafal, Zimroz Radoslaw, Wylomanska Agnieszka	<i>Bearing degradation indicator using characteristic frequencies applied on non-stationary vibration signals</i> <b>Marsick Adrien</b> , Bertoni Renaud, André Hugo, Khelf Ilyes, Leclère Quentin, Antoni Jérôme
11:20	<i>Engine-to-cabin airborne transmission</i> <b>Moal Stefan</b>	<i>Rubber part characterisation for rotordynamics analysis</i> <b>Tezenas Du Montcel Florian</b> , Baguet Sébastien, Andrianoely Marie-Ange, Dufour Régis, Grange Stéphane, Briançon Laurent, Kanty Piotr	<i>Noise robust gearbox defect diagnosis</i> <b>Sekko Edgard</b> , Capdessus Cécile, Attal Emmanuel	<i>Optimal filter design for rotating machinery fault detection under time-varying speed conditions</i> <b>Schmidt Stephan</b> , Wilke Daniël N., Heyns p. Stephan, Gryllias Konstantinos C.
11:40	<i>A multi-port scattering matrix formalism for the acoustic prediction in duct networks</i> Calmettes Cyril, Perrey-Debain Emmanuel, Lefrançois Emmanuel, Caillet Julien	<i>Determining Loads for Down-scaled Testing of Wind Turbine Pitch Bearings using an Augmented Kalman Filter and Virtual Measurements</i> <b>Dwek Nathan</b> , De Gregoriis Daniel, Olave Mireia, Kirchner Matteo, Naets Frank	<i>Modeling and identifying non-stationary long-term historical condition monitoring data in the presence of noise with non-Gaussian characteristics</i> <b>Shiri Hamid</b> , Zimroz Pawel, Wylomanska Agnieszka, Zimroz Radoslaw	<i>The design of optimal indicators for early fault detection using a generalized likelihood ratio test</i> <b>Kestel Kayacan</b> , Antoni Jérôme, Peeters Cédric, Leclère Quentin, Girardin François, Ooijevaar Ted, Helsen Jan
12:00	<i>Processing and analysis of flight test internal / external microphone measurements</i> <b>Leclère Quentin</b> , Antoni Jérôme, Julliard Emmanuel	<i>Identification of vibration damping in 3D-printed lattice structures</i> <b>Tanays Rémy</b> , Castro Moreno Antonio, Jaulent aude, Filloux Benoit, Barriere Ludovic, Michon Guilhem, Sanches Leonardo, Fabries Christophe	<i>Robust and automatic diagnosis of rotating machine faults by long-term spectral analysis</i> Had Anas, <b>Andre Hugo</b> , Jouve Jérémy, Morel Hervé, El Badaoui Mohamed	<i>Combined bearing faults detection using the Multiple Improved Envelope Spectra via Feature Optimization gram (MIESFO-gram) in complex systems</i> <b>Yazdanianasr Mahsa</b> , Mauricio Alexandre, Gryllias Konstantinos
12:20	After session discussion and Q&A	<i>Stochastic Digital Twin of a Composite Plate for Predicting Lamb Wave Propagation</i> Ferreira Leonardo, <b>Teloli Rafael</b> , Da Silva Samuel, Figueiredo Eloi, Moldovan Dragos, Maia Nuno, Cimini Jr Carlos		<i>Temporal companding for the evaluation of a rotor rotation speed during strong transients</i> <b>Griffaton Julien</b>
12:40	Lunch break			
	JISFA		SURVISHNO	
	<b>Passive &amp; active aircraft noise control</b> <b>Chair: Adrien Pelat</b>	<b>Data driven condition monitoring 1</b> <b>Chair: Mario Eltabach</b>	<b>Passive Control of Vibrations</b> <b>Chair: Régis Dufour</b>	<b>Condition Monitoring 3</b> <b>Chair: Francesco Castellani</b>
14:00	<i>Absorption and transmission of boundary layer noise through micro-perforated panel structures: measurements and modellings</i> <b>Maury Cédric</b>	<i>Vibration based milling diagnostics using Artificial Intelligence</i> Vinchon Guillaume, <b>Knittel Dominique</b> , Nouari mohammed, Makich Hamid, Yakob Abderrahmane, Romani Daniel	<i>Vibration response of a machine structure filled with high-damping material</i> Troncossi Marco, Rivola Alessandro, Vincenzi nicolo, <b>Martini Alberto</b>	<i>Experimental study on condition indicators for severity estimation of growing spall in bearings</i> <b>Bubill Tal</b> , Klein Renata, Maljaars Bert, Taal Cees, Bortman Jacob
14:20	<i>Overview of Onera acoustic active control activities in helicopter cabin</i> <b>Simon Frank</b>	<i>Multi-Source Information Fusion Fault Diagnosis for Rotating Machinery using Signal and Data Processing</i> <b>Makrouf Imar</b> , Benzerari Mourad, Ouachtouk Ilias, Dahi Khalid	<i>Nonlinear damper approaches to flutter mitigation in highly-flexible wings</i> <b>Alcorta Roberto</b> , Chouvion Benjamin, Montagnier Olivier, Leroy Annie, Michon Guilhem	<i>Wavelet-based high order spectrum for local damage diagnosis of gears under different operating conditions</i> <b>Zhu Rui</b> , Mousmouli Georgios, Gryllias Konstantinos
14:40	<i>Acoustic Absorption in cabin</i> <b>Revalor Yann</b>	<i>Wind turbine drivetrain fault detection using physics-informed multivariate deep learning</i> <b>Jamil Faras</b> , Peeters Cédric, Verstraeten Timothy, Helsen Jan	<i>Nonlinear passive control of galloping of overhead transmission lines: design and numerical verifications</i> <b>Leroux Matthieu</b> , Langlois Sébastien, Ture Savadkoohi Alireza	<i>Identification of non-informative noise component in time-frequency representations. Application to vibration-based local damage detection</i> <b>Wylomanska Agnieszka</b> , Zimroz Radoslaw, Barszcz Tomasz, Skowronek Katarzyna, Antoni Jérôme
15:00	<i>Multimodal characterisation of acoustic liners using MAINE Flow facility</i> <b>T. Humbert</b> , J. Golliard	<i>Anomaly Detection in Aircraft Engine Vibration Using Deep Convolutional Autoencoder</i> <b>El Hidali Abdallah</b>	<i>Understanding vibroimpact damping through a numerical energy based approach</i> Chabrier Robin, Foltête Emmanuel, Chevallier Gaël, <b>Sadoulet-Reboul Emeline</b>	<i>Robust estimators of autocorrelation function in application to local damage detection for non-Gaussian signals</i> <b>Zulawinski Wojciech</b> , Antoni Jérôme, Zimroz Radoslaw, Wylomanska Agnieszka
15:20	<i>Smart Acoustic Lining for UHBR Engines</i> K. Billon, M. Gillet, E. Salze, M. Volery, E. De Bono, <b>M. Ouisse</b> , H. Lissek, M. Collet, <b>J. Mardjono</b>	<i>Airplane turbulence detection with hybrid deep learning model</i> <b>Dampeyrou Charles</b> , Dion Jean-Luc, Dehoux Anita, Ghienne Martin	<i>A passive nonlinear absorber for controlling pathological tremors of human arm</i> <b>Gebai Sarah</b> , Ture Savadkoohi Alireza, Lamarque Claude-Henri	<i>Algorithm for the detection of faults in rolling element bearings running under tachless and variable rotating speed conditions</i> Valdés Lisa, <b>Hernandez Fidel</b> , Rodri-guez Andy
15:40	After session discussion and Q&A	<i>Ball bearing diagnosis using a homogenous hybrid database in a supervised machine learning</i> <b>Sow Souleymane</b> , Chiementin Xavier, Rasolofondraibe Lanto, Cousinard Olivier	<i>Control based continuation of non-autonomous system - stabilization mechanisms</i> <b>Gourc Etienne</b>	
16:00	Coffee break			
16:20	Exhibitor session			
17:00	Survishno Contest session			
17:40	<b>Table ronde - Evolutions des métiers et des formations en ingénierie mécanique, acoustique et vibratoire en réponse aux besoins de l'industrie des transports de demain. Chair: Jean-Baptiste Dupont, Adrien Pelat</b>			
19:30	Congress Social event - JJCAB prizes & SFA industrial medal - Congress Diner			

Resonance Conference - Thursday 13th				
09:20	Keynote Lecture by Régis Dufour - INSA Lyon, LaMCoS, UMR CNRS 5259 - chair: Guilhem Michon <i>Nonlinear on-board rotordynamics</i>			
10:00	Resonance Summer Camp session			
10:20	Coffee break			
	JISFA		SURVISHNO	
	<b>Noise and Vibration of Spacecrafts</b> Chair: <b>Léonardo Sanches</b>	<b>Data driven condition monitoring 2</b> Chair: <b>Agnieszka Wylomanska</b>	<b>NVH of eco-efficient powertrains</b> Chair: <b>Didier Remond</b>	<b>Structural Health Monitoring</b> Chair: <b>Fabien Chevillotte</b>
10:40	<i>Some experimental developments on supersonic jet noise reduction by water injection</i> Patrick Berterretche, Gildas Lalizel, Romain Bouju, <b>Pierre Beltra</b> , Florian Moreau, Eva Dorignac, Hadrien Lambare, Yves Gervais	<i>Detection of machine mechanical faults using vibrations and deep autoencoders</i> <b>Eltabach Mario</b> , Govaert Gérard	<i>Multi-Physic Analysis of Power Electronic Control Parameters in a Simulation Framework</i> <b>Salamone Nicolo</b> , Kucukoskun Korcan, Colangeli Claudio, Bianciardi Fabio, Janssens Karl, Sarrazin Mathieu, Desmet Wim	<i>From Lab to tail boom: the challenges to develop a SHM system in an industrial context</i> <b>Bottois Paul</b> , Ordonneau Benjamin, Vo Thien
11:00	<i>Large eddy simulations of launcher lift-off noise and comparisons to experiments</i> <b>Julien Troyes</b> , François Vuillot	<i>Wind turbine gearbox condition monitoring through a multi-scale data-driven approach</i> <b>Castellani Francesco</b> , Vedovelli Matteo	<i>NVH optimization of electric motors: optimization under constraints and uncertainty</i> <b>Dupont Jean-Baptiste</b> , Jeannerot Martin, Sadoulet-Reboul Emeline, Ouisse Morvan, Lanfranchi Vincent	<i>On the time reversal method for fault diagnosis on a beam: some preliminary results</i> <b>Huguet Méliandre</b> , Ture Savadkoohi Alireza, Lamarque Claude-Henri, Collet Manuel
11:20	<i>Forced and shock vibration reduction in a honeycomb sandwich panel using a Vibro-Impacted Acoustic Black Hole attenuator</i> Haiqin Li, Patrick O'Donoghue, <b>Adrien Pelat</b> , François Gautier, Cyril Touzé, Florent Masson	<i>Vibration-based unsupervised detection of common faults in rotating machinery under varying operating speeds</i> <b>Bourdalos Dimitrios M.</b> , Sakellariou John S.	<i>Resynchronization of tonal acoustic field in multi-pass non-stationary microphone array measurements</i> <b>Kottakota Kalasagarreddi</b> , Antoni Jérôme, Leclère Quentin, Bouley Simon, Colangeli Claudio	<i>Structural Health Monitoring using time reversal techniques in acoustic domains</i> Ponthus Nicolas, Wassereau Thibault, Guyader Guillaume, <b>Le Gall Thomas</b> , Vouagner Pascal, Charvin Jacques
11:40	<i>Influence of non-structural elements on satellite dynamics</i> <b>Xavier Cadiot</b>	<b>Acoustic Treatment</b> Chair: <b>Quentin Leclère</b>	<i>Virtual measurements for exterior vibroacoustic problems using experimental modal models</i> <b>Staiger Julian</b> , Naets Frank, Troge Jan, Van Ophem Sjoerd	<i>Operational modal analysis for scour monitoring of bridge piers</i> <b>Belmokhtar Mohamed</b> , Ture Savadkoohi Alireza, Chevalier Christophe, Schmidt Franziska
12:00	Round table: Additional Q&A and open discussion about the session topic	<i>Acoustic porous resonant metamaterials for rotor insulation</i> <b>Plisson Jules</b> , Lachheb Anas, Cavalheiro Thiago	<i>Resynchronization of sequential measurements using the Maximally-Coherent Reference technique</i> <b>Albezzawy Muhammad Nabil</b> , Antoni Jérôme, Leclère Quentin	<i>A study on efficient approaches for modeling Lamb wave propagation in joint metal plates with embedded defect</i> <b>Mardanshahi Ali</b> , Lu Houyu, Van Den Abeele Koen, <b>Chronopoulos Dimitrios</b>
12:20		<i>Experimental characterization of recycled surgical face masks used directly as acoustic treatments</i> <b>Castori Colin</b> , Parisot-Dupuis Hélène		<i>Effects of multi-axis random vibration environments on fatigue-life and durability predictions</i> <b>Proner Enrico</b> , Mucchi Emiliano
12:40	Lunch break			
14:00	Closing Ceremony			