



Program	Main Room / T3	Room T1	Room T2	Room I4	Room I5
<b>Monday, February 17</b>					
08:00 - 09:00	<b>Registration (welcome and reception desk always open during the conference days)</b>				
08:30 - 08:45	Welcome address	<b>Prof. Sergio De Rosa &amp; Prof. Rita Mastrullo</b>			
08:45 - 09:15	Opening Lecture	<b>Prof. Francesco Marulo</b>			
09:20 - 11:00	Technical sessions 1		<b>CASTLE</b>	<b>GEAR NOISE</b>	<b>VIBROACOUSTICS &amp; FSI I</b>
11:00 - 11:20	Coffee Break				
11:20 - 12:40	Technical sessions 2		<b>IMPACT DYNAMICS</b>	<b>AEROELASTICITY &amp; GVT</b>	<b>NUMERICAL METHODS I</b>
12:40 - 14:00	Lunch				
14:00 - 15:00	Keynotes	<b>Prof. Ines Artega Lopez &amp; Dr. Elena Ciappi</b>			
15:00 - 16:40	Technical sessions 3		<b>ACOUSTICS I</b>	<b>T-WING</b>	<b>METAMATERIALS</b>
16:40 - 17:00	Coffee Break				
17:00 - 18:00	Technical sessions 4		<b>ACOUSTICS II</b>	<b>STRUCTURAL DYNAMICS I</b>	
<b>Tuesday, February 18</b>					
09:00 - 11:00	Technical sessions 5		<b>DEVISU</b>	<b>MACHINE LEARNING &amp; SHM</b>	<b>VIBROACOUSTICS &amp; FSI II</b>
11:00 - 11:30	Coffee Break				
11:30 - 13:00	Special Session	<b>Talented Researchers</b>			
13:00 - 14:00	Lunch				
14:00 - 15:00	Keynotes	<b>Prof. Erasmo Carrera &amp; Prof. Stefan Rinderknecht</b>			
15:00 - 16:40	Technical sessions 6		<b>VIPER I</b>	<b>WAVES</b>	<b>NUMERICAL METHODS II</b>
18:00 - 20:00	Social event: Tour in Napoli				
20:30 - 23:00	Pizza dinner				
<b>Wednesday, February 19</b>					
09:00 - 10:00	Keynotes	<b>Prof. Weidong Zhu &amp; Dr. Alain Le Bot</b>			
10:00 - 12:00	Technical sessions 7		<b>VIPER II</b>	<b>MATERIALS &amp; DAMPING</b>	<b>STRUCTURAL DYNAMICS II</b>
12:00 - 13:00	Arrivederci (Lunch Cocktail)				

**February 17<sup>th</sup>, 2020****Monday****Welcome**08:30 – 08:45 *S. De Rosa, R. Mastrullo***Opening Lecture**08:45 – 09:15 LIFE (LIFE, SAFE, QUIET) FOR AERONAUTICS  
*F. Marulo***Keynotes**14:15 – 14:45 APPLICATIONS OF MICROPHONE ARRAYS AND MACHINE LEARNING TO FAULT DETECTION  
*I. A. Lopez*14:45 – 15:15 OPEN CHALLENGES FOR STRUCTURAL DYNAMICS IN MARINE ENGINEERING  
*E. Ciappi***February 18<sup>th</sup>, 2020****Tuesday****Special Session: Talented Researchers**11:30 – 12:00 PADÉ APPROXIMANTS FOR MULTIVARIATE REDUCED ORDER MODELS  
*R. Rumpler*12:00 – 12:30 GENERAL BLOCH MODELING OF PIECEWISE PERIODIC STRUCTURES  
*C. Droz, E. Deckers, W. Desmet*12:30 – 13:00 TOWARDS NONLINEAR MULTIMODAL APPROACHES FOR VIBRATION ENERGY HARVESTING  
*N. Kacem and N. Bouhaddi***Keynotes**14:00 – 14:30 ASSESSMENT OF COMPUTATIONAL MODELS FOR THE DYNAMIC RESPONSE OF ROTATING COMPOSITE TURBINE BLADES  
*E. Carrera\*, M. Filippi, D. Giusa, A. Pagani, E. Zappino*14:30 – 15:00 SYSTEM DYNAMICS IMPROVEMENT WITH STATE-OF-THE-ART MECHATRONICS – POTENTIALS AND CHALLENGES  
*S. Rinderknecht***February 19<sup>th</sup>, 2020****Wednesday****Keynotes**09:00 – 09:30 VIBRATION-BASED DAMAGE DETECTION AND NONLINEAR DYNAMIC ANALYSIS  
*W. Zhu*09:30 – 10:00 STATISTICAL ENERGY ANALYSIS, THEORETICAL FOUNDATIONS AND RANGE OF APPLICABILITY  
*A. Le Bot*

## Technical sessions

**February 17<sup>th</sup>, 2020**

**Monday**

### Technical sessions 1

#### CASTLE

09:20 – 09:40	301055	ELIGIBILITY OF ELECTROSPUN NANOFIBERS FOR AERONAUTICAL THERMOACOUSTIC INSULATION BLANKETS <i>B. Vitolo, M. Guida, T. Polito, F. Marulo, F. Branda</i>
09:40 – 10:00	300730	OPTIMIZATION OF PASSIVE AND ACTIVE SOUNDPROOFING FOR AN ADVANCED TURBO-PROP AIRCRAFT CABIN <i>R. Lombardi, P. Vitiello, I. Dimino, G. Petrone, M. Barbarino</i>
10:00 – 10:20	305157	INNOVATIVE SOUNDPROOFING MATERIALS THROUGH ELECTROSPINNING <i>F. Branda</i>
10:20 – 10:40	301743	ACOUSTIC CHARACTERISTICS OF INNOVATIVE MATERIALS THROUGH ELECTROSPINNING <i>G. Iannace</i>
10:40 – 11:00	303627	PASSIVE NOISE CONTROL ORIENTED DESIGN OF AIRCRAFT HEADRESTS <i>V. Giannella, R. Citarella, M. Barbarino, P. Vitiello, D. Bianco, G. Petrone</i>

#### GEAR NOISE

09:20 – 09:40	298653	DYNAMIC POWER LOSS MODEL INCLUDING FRICTIONAL EFFECTS FOR SPUR GEARS <i>M. Hammami, N. Feki, O. Ksentini, M. S. Abbes, M. Haddar</i>
09:40 – 10:00	299758	VIBROACOUSTIC SIMULATION FE METHODOLOGIES: EXTERNAL GEAR PUMP CASE STUDY <i>G. Miccoli, K. Hamiche</i>
10:00 – 10:20	298500	SOME RESULTS OF VIBROACOUSTIC OPTIMIZATION OF A RAILWAY GEARBOX <i>K. Landet, J. Perret-Liaudet, E. Rigaud, M. Fraces</i>
10:20 – 10:40	400003	INFLUENCE OF TOOTH PROFILE MODIFICATIONS ON THE DYNAMIC BEHAVIOR OF A PLANETARY GEAR SET: EXPERIMENTAL INVESTIGATION AND NUMERICAL VALIDATION FOR DIFFERENT AMPLITUDES OF TOOTH PROFILE MODIFICATIONS <i>J. Neufond, E. Rigaud, J. Perret-Liaudet, A. Carbonelli</i>

#### VIBROACOUSTICS & FSI I

09:20 – 09:40	300094	VIBRO-ACOUSTIC CHARACTERIZATION OF A MILITARY SHELTER SYSTEM <i>M. Viscardi, M. Lomasto, R. Moliterno</i>
09:40 – 10:00	300180	VIBRO-ACOUSTIC PERFORMANCE ANALYSIS OF A TURBOPROP INSULATION PACKAGE <i>M. Viscardi, G. Bizzarro, V. M. Porpora, G. Di Paola</i>
10:00 – 10:20	300557	TOWARDS A COUPLED FLUID-STRUCTURE MODEL FOR SLUG FLOW IN A FLEXIBLE RISER <i>A. Elliott, G. Hunt, A. Cammarano, G. Falcone</i>
10:20 – 10:40	299972	TOWARDS FULL-FIELD MODAL ANALYSIS: COMBINING OPTICAL TECHNIQUES WITH STRUCTURAL DYNAMICS TESTING <i>E. Di Lorenzo, D. Mastrodicasa, L. Wittevrongel, P. Lava, B. Peeters</i>
10:40 – 11:00	297188	COMPARISON OF THE PERFORMANCE OF VIBROACOUSTIC SIMILITUDE METHODS <i>C. Adams, J. Bös, T. Melz</i>

### Technical sessions 2

#### IMPACT DYNAMICS

11:20 – 11:40	301291	DYNAMIC BUCKLING INVESTIGATION OF AIRCRAFT COMPOSITE STANCHIONS SUBJECTED TO CYCLIC LOADING CONDITIONS <i>F. Di Caprio, A. Sellitto, S. Saputo, M. Guida, A. Riccio</i>
11:40 – 12:00	298860	A SENSITIVITY ANALYSIS ON THE DAMAGE BEHAVIOR OF A LEADING EDGE SUBJECT TO BIRD STRIKE <i>F. Di Caprio, A. Sellitto, S. Saputo, M. Guida, A. Riccio</i>
12:00 – 12:20	293644	EFFECT OF COLD SPRAY DEPOSITION ON THERMOSETTING COMPOSITE SUBSTRATES UNDER DYNAMIC LOADS <i>I. Papa, A. Viscusi, A. S. Perna, A. Astarita, V. Lopresto, L. Carrino, V. Antonucci, M. R. Ricciardi</i>
12:20 – 12:40	400001	A SIMPLIFIED FINITE ELEMENT MODELLING OF A FULL-SCALE FUSELAGE SECTION FOR CRASHWORTHINESS DESIGN <i>M. Manzo, A. De Luca, D. Perfetto, L. Di Palma, M. Waimer, P. Schatrow</i>

<b>AEROELASTICITY &amp; GVT</b>		
11:20 – 11:40	293198	AEROELASTICITY OF BISTABLE COMPOSITE PLATES <i>F. Nicassio, G. Scarselli</i>
11:40 – 12:00	300156	FLUTTER ANALYSIS OF A LARGE CIVIL AIRPLANE EQUIPPED WITH MORPHING WING FLAPS <i>R. Pecora, M. C. Noviello</i>
12:00 – 12:20	300665	ACTIVE OPTIMAL CONTROL FOR FLUTTER IN SUSPENSION BRIDGES <i>E. Paifelman, G. Pepe, A. Carcaterra</i>
12:20 – 12:40	293110	AIRCRAFT MODEL UPDATING ACCORDING RESULTS OF GROUND VIBRATION TEST <i>J. Ceerdle</i>
<b>NUMERICAL METHODS I</b>		
11:20 – 11:40	300506	INTELLIGENT SLIDING MODE REFERENCE CONDITIONING CONTROLLER <i>M. Haddar, R. Chaari, S. C. Baslimisli, F. Chaari, M. Haddar</i>
11:40 – 12:00	292502	ENERGY FLOW IN 2D ORTHOTROPIC MEDIA BY THE RADIATIVE ENERGY TRANSFER THEORY <i>Q. Zhong, H. Chen, A. Le Bot</i>
12:00 – 12:20	298072	PROGRESSIVE FAILURE ANALYSIS OF LAMINATED COMPOSITE BEAMS USING THE WAVE FINITE ELEMENT METHOD <i>M. Mallouli, M. Ben Souf, O. Bareille, M. Ichchou, T. Fakhfakh, M. Haddar</i>
12:20 – 12:40	300726	ENHANCEMENTS IN STRUCTURAL OPTIMIZATION OF AUTOMOTIVE UNDERBODY PANELS SUBJECTED TO WATER WADING LOAD <i>A. Daving</i>
<b>Technical sessions 3</b>		
<b>ACOUSTICS I</b>		
15:00 – 15:20	298401	INVESTIGATION ON AN ADAPTIVE HELMHOLTZ RESONATOR CONCEPT <i>A. Benouhiba, M. Ouisse, K. Rebenorosa, N. Andreff</i>
15:20 – 15:40	296866	NON-LOCAL BOUNDARY CONTROL FOR BROADBAND NON-RECIPROCAL PROPAGATION: ANALYTICAL DEMONSTRATION AND EXPERIMENTAL VALIDATION <i>E. De Bono, M. Collet, S. Karkar, G. Matten, M. Ouisse</i>
15:40 – 16:00	292729	NUMERICAL SIMULATION OF SOUND TRANSMISSION THROUGH PORO-ELASTIC SHELL STRUCTURES <i>M. Gfrerer, M. Schanz</i>
16:00 – 16:20	293444	NUMERICAL ANALYSES OF THE SOUND TRANSMISSION THROUGH DOUBLE-GLAZING SYSTEM AT LOW FREQUENCIES <i>C. Soussi, W. Larbi, M. Aucejo, JF. Deü</i>
16:20 – 16:40	297506	SOUND TRANSMISSION ANALYTICAL SOLUTION OF COMPOSITE SHELL STRUCTURES EMBEDDING VISCOELASTIC LAYERS <i>A. Alaimo, C. Orlando, S. Valvano</i>
<b>T-WING</b>		
15:00 – 15:20	400006	NUMERICAL INVESTIGATION ON A TILTROTOR WING UNDER BIRD IMPACT CONDITION <i>F. Di Caprio, F. Ciardiello</i>
15:20 – 15:40	400005	COMPARISON OF NUMERICAL MODELS FOR THE PREDICTION OF BLADDER TANK CRASHWORTHINESS <i>D. Cristillo, F. Di Caprio, C. Pezzella, C. Paciello</i>
15:40 – 16:00	400009	TILTROTOR STRUCTURAL-ACOUSTIC DATA ACQUISITION AND ANALYSIS <i>A. D. Marano, T. Polito, M. Guida, F. Marulo, M. Belardo, M. Barbarino, A. Perazzolo</i>
16:00 – 16:20	400007	DESIGN STRATEGY OF THE WING OF THE NEXT GENERATION CIVIL TILT ROTOR TECHNOLOGY DEMONSTRATOR. <i>M. Belardo, j. Beretta, A.D. Marano, G. Diodati, N. Paletta, M. Graziano, M. Capasso, L. Di Palma</i>
<b>METAMATERIALS</b>		
15:00 – 15:20	300817	ATTENUATION PERFORMANCE DUE TO CORRELATED DISORDER IN RAINBOW METAMATERIALS <i>A. T. Fabro, H. Meng, D. Chronopoulos</i>
15:20 – 15:40	299110	OPTIMAL DESIGN OF RAINBOW METAMATERIALS <i>H. Meng, D. Chronopoulos, A. T. Fabro, W. Elmadih, R. Leach</i>
15:40 – 16:00	300228	DYNAMIC PROPERTIES OF METAMATERIALS WITH DIFFERENT RESONATOR CONNECTION METHODS <i>H. Meng, D. Chronopoulos</i>

16:00 – 16:20	297107	DYNAMIC ANALYSIS OF METASTRUCTURE BEAM WITH LOW FREQUENCY MULTI-MODE RESONATORS <i>Q. C. Wu, C. Droz, M. Ichchou, S. I. Xie</i>
16:20 – 16:40	300738	PERIODIC AND RANDOM LONG-RANGE INTERACTIONS IN METAMATERIALS <i>F. Mezzani, A. S. Rezaei, A. Carcaterra</i>
<b>Technical sessions 4</b>		
<b>ACOUSTICS II</b>		
17:00 – 17:20	300175	MULTIMODAL CONTROL OF INTERIOR RANDOM SOUND PRESSURE USING OPTIMIZED TUNED MASS DAMPERS <i>E. Mrabet, M. Ichchou, N. Bouhaddi</i>
17:20 – 17:40	300947	FIRST MODELS FOR STRUCTURAL ENERGY TRANSMISSION DECOUPLING <i>G. Mazzeo, M. Ichchou, G. Petrone, O. Bareille, F. Franco, S. De Rosa</i>
17:40 – 18:00	297363	ANALYSIS OF SOUND RADIATION FROM COMPLEX TIMOSHENKO BEAM BASED ON SECOND STRAIN GRADIENT THEORY <i>G. Zhu, M. Ichchou, AM. Zine</i>
<b>STRUCTURAL DYNAMICS I</b>		
17:00 – 17:20	300689	UTILIZING A LUMPED PARAMETER MODEL FOR ANALYZING THE SOUND RADIATION OF A SPINNING PLATE <i>M. Maeder, R. D'Auria, E. Grasso, G. Petrone, S. De Rosa, M. Klaerner, L. Kroll, S. Marburg</i>
17:20 – 17:40	303234	RELIABILITY AND OPTIMIZATION OF EMBEDDED MECHATRONIC SYSTEMS: WHAT APPLICATION FOR THE AUTOMOTIVE AND AERONAUTICS INDUSTRY <i>A. El Hami</i>
17:40 – 18:00	300602	TORSIONAL ENERGY FLOW THROUGH A TOUGH HYDROGEL VIBRATION ISOLATOR <i>L. Kari</i>

February 18<sup>th</sup>, 2020

Tuesday

Technical sessions 5

DEVISU

09:00 – 09:20	300447	TUNING OF SHUNTED ELECTRO-MAGNETIC ABSORBERS BASED ON ELECTRICAL POWER DISSIPATED <i>E. Turco, L. Dal Bo, P. Gardonio</i>
09:20 – 09:40	296200	REFINED BEAM MODELS FOR THE COMPUTATION OF DISPERSION RELATIONS AND TRANSMISSION IN PERIODIC METAMATERIALS <i>A. De Miguel, A. Pagani, M. Filippi, M. Cinefra, E. Carrera</i>
09:40 – 10:00	292266	NONLINEAR FREE VIBRATIONS OF COMPOSITE STRUCTURES VIA THE X-RITZ METHOD <i>A. Milazzo</i>
10:00 – 10:20	400000	NONLINEAR VIBRATIONS OF VARIABLE-STIFFNESS PLATES USING DIFFERENT SEMI-ANALYTICAL MODELS <i>A. Y. Cheng, R. Vescovini, E. L. Jansen</i>
10:20 – 10:40	300439	INVESTIGATION OF THE ARTIFICIAL NEURAL NETWORK PREDICTION CAPABILITIES APPLIED TO VIBRATING PLATES IN SIMILITUDE <i>A. Casaburo, G. Petrone, V. Meruane, F. Franco, S. De Rosa</i>
10:40 – 11:00	304883	IMPROVED WAVE DISPERSION PROPERTIES IN A PERIDYNAMIC BAR <i>M. Zaccariotto</i>

MACHINE LEARNING AND SHM

09:00 – 09:20	299247	MACHINE HEALTH DIAGNOSTICS USING ACOUSTIC IMAGING AND ALGORITHMS FOR MACHINE LEARNING <i>A. Aulitto, I. Lopez Arteaga, D. Kostić, F. Boughorbel, S. De Rosa, G. Petrone</i>
09:20 – 09:40	300577	UNSUPERVISED LEARNING ALGORITHM AND A SENSOR SWARM FOR STRUCTURAL HEALTH MONITORING OF A BRIDGE <i>N. Roveri, S. Milana, A. Culla, P. Conte, A. Carcaterra</i>
09:40 – 10:00	297507	COMBINING IMPORTANCE SAMPLING WITH MACHINE LEARNING TO ACCELERATE STRUCTURAL RELIABILITY ANALYSIS <i>W. You, A. Saidi, AM. Zine, M. Ichchou</i>
10:00 – 10:20	297333	SIMULATION-BASED HEALTH MONITORING OF A COMPOSITE SANDWICH STRUCTURE USING CONVOLUTIONAL NEURAL NETWORK <i>Z. Liu, M. Ardabilian, M. Ichchou, AM. Zine</i>
10:20 – 10:40	300772	RELIABILITY ASSESSMENT OF DAMAGE DETECTION TECHNIQUES BASED ON GUIDED ULTRASONIC WAVES <i>F. Ricci, V. Memmolo, L. Maio, N. D. Boffa, E. Monaco</i>
10:40 – 11:00	300973	IMPROVED STRUCTURAL HEALTH MONITORING FEATURES ON 3D PRINTED STRUCTURES BY PIEZOELECTRIC IMPLANTS <i>X. Cui, O. Bareille, M. Salvia</i>

VIBROACOUSTICS & FSI II

09:00 – 09:20	302787	VIBROACOUSTIC PERFORMANCES OF AN ACOUSTIC BOX THROUGH HYBRID FE-SEA METHOD <i>G. Piccirillo Sibiano, G. Petrone, G. Bizzarro</i>
09:20 – 09:40	296932	FULLY-COUPLED VIBRO-ACOUSTIC ANALYSIS OF MULTI-LAYERED PLATES BY CUF FINITE ELEMENTS <i>M. Cinefra, E. Zappino, E. Carrera, S. De Rosa</i>
09:40 – 10:00	293432	SOUND TRANSMISSION THROUGH BAFFLED SEMI-CYLINDRICAL SHELLS USING TRANSFER MATRIX METHOD <i>A. Parrinello, N. Atalla</i>
10:00 – 10:20	298135	RESPONSE OF A SUBMERGED FLUID-FILLED CYLINDRICAL SHELL TO TRANSIENT ACOUSTIC PULSES AND WEAK SHOCK WAVES <i>S. Iakovlev, H. A. F. A. Santos</i>
10:20 – 10:40	298772	VIBRATION OF PRESTRESSED STRUCTURES COUPLED WITH AN INCOMPRESSIBLE FLUID <i>C. Hoareau, JF. Deü, R. Ohayon</i>



<b>NON-LINEAR DYNAMICS</b>		
09:00 – 09:20	301098	ON THE PERFORMANCE OF A FLOW ENERGY HARVESTER USING TIME DELAY <i>Z. Ghouli, M. Belhaq, M. Hamdi</i>
09:20 – 09:40	300846	NON-LINEAR FREE VIBRATIONS OF FUNCTIONALLY GRADED NON-UNIFORM BEAMS WITH DISCONTINUITIES <i>M. Chajdi, A. Adri, K. El Bikri, R. Benamar</i>
09:40 – 10:00	304167	GEOMETRICALLY LINEAR FREE VIBRATION OF RECTANGULAR PLATES SIMPLY SUPPORTED AT TWO OPPOSITE EDGES AND CONNECTED BY DISTRIBUTED TRANSLATIONAL AND ROTATIONAL SPRINGS AT THE TWO OTHER EDGES <i>A. Babahammou, R. Banamar</i>
10:00 – 10:20	301649	A NEW FRICTION MODEL TO DESCRIBE THE FREE DYNAMIC RESPONSE OF A SLIDING OSCILLATING SYSTEM UNDER LUBRICATION <i>J. Perret-Liaudet, A. Hriouech, M. Belin, Ml. De Barros-Bouchet</i>
10:20 – 10:40	300529	INVESTIGATING THE APPROXIMATION OF HIGHER-ORDER NONLINEAR BEHAVIOUR INTO NON-INTRUSIVE REDUCED-ORDER MODELS <i>A. Elliott, A. Cammarano</i>
10:40 – 11:00	302732	THE DYNAMICS OF DELAYED BIRHYTHMICITY OSCILLATOR WITH MODULATED DELAY AMPLITUDE <i>M. Hamdi, M. Belhaq, Z. Ghouli</i>
<b>Technical sessions 6</b>		
<b>VIPER I</b>		
15:00 – 15:20	293149	K-SPACE ANALYSIS OF COMPOSITE SANDWICH SHELL WITH SMALL-SCALE RESONATORS <i>G. Tufano, M. Ichchou, W. Desmet, N. Atalla</i>
15:20 – 15:40	299671	UNCERTAINTIES IN WAVE CHARACTERISTIC OF TWO-DIMENSIONAL PERIODIC MEDIA USING THE FUZZY WAVE FINITE ELEMENT METHOD <i>R. P. Singh, S. De Rosa, F. Franco, O. Bareille, M. Ichchou, G. Petrone</i>
15:40 – 16:00	298707	WAVE AND FINITE ELEMENT ANALYSIS OF QUASI PERIODIC 2D PHONONIC SUPER-CELL CRYSTALS <i>S. Timorian, S. De Rosa, F. Franco, M. Ouisse, N. Bouhaddi</i>
16:00 – 16:20	296962	ON THE MULTI-MODAL BEHAVIOR AND INNER RESONANCE OF STIFFENED SHELLS <i>M. Ichchou, G. Tufano, O. Bareille, B. Pluymers, A. Zine, W. Desmet</i>
16:20 – 16:40	300004	INVESTIGATION OF THE SOUND TRANSMISSION LOSS WITH THE USE OF THE INNER-RESONANCE AND THE VEERING EFFECT OF A MULTI-LAYER CORE TOPOLOGY SYSTEM <i>N. Guenfoud, C. Droz, M. Ichchou, O. Bareille, E. Deckers, W. Desmet</i>
<b>WAVES</b>		
15:00 – 15:20	297025	WAVE FINITE ELEMENT METHOD BASED ON SECOND STRAIN GRADIENT ELASTICITY THEORY FOR ONE-DIMENSIONAL NANO-SIZED PERIODIC STRUCTURES <i>B. Yang, M. Ichchou, A. Zine</i>
15:20 – 15:40	300585	WAVE PROPAGATION IN AN AIRCRAFT WING SLAT FOR DE-ICING PURPOSES <i>D. Raffaele, T. P. Waters and E. Rustighi</i>
15:40 – 16:00	297352	WAVE REFLECTION AND TRANSMISSION ANALYSIS THROUGH COMPLEX ROD BASED ON SECOND STRAIN GRADIENT THEORY <i>G. Zhu, M. Ichchou, A. Zine</i>
16:00 – 16:20	297006	ATYPICAL DISPERSION FEATURES IN CONTRASTED RESONANT CELLULAR PANELS: ANALYTICAL HOMOGENIZED MODEL AND EXPERIMENTAL MEASUREMENTS <i>P. Fossat, C. Boutin, M. Ichchou</i>
16:20 – 16:40	300480	BAND GAP OPTIMIZATION OF PERIODIC BEAMS USING FOURIER SHAPE COEFFICIENTS <i>V. De Lima, J. R. Arruda</i>
<b>NUMERICAL METHODS II</b>		
15:00 – 15:20	300263	BEST PRACTICES FOR SPACECRAFTS ACOUSTIC ANALYSIS AND ASSESSMENTS <i>M. Cordaro</i>
15:20 – 15:40	300342	IDENTIFICATION OF FORCES IN EULER-BERNOULLI BEAMS : BAYESIAN UPDATING <i>A. Zine, A. Kawano</i>
15:40 – 16:00	301178	SIMULATION OF THE TBL INDUCED VIBRATIONS OF A PLATE USING VIRTUAL SOURCES <i>A. Pouye</i>
16:00 – 16:20	303237	THERMAL MODELING OF HIGH POWER TRANSISTOR HEMT <i>A. Amar, A. El Hami, B. Radi</i>

**February 19<sup>th</sup>, 2020**

**Wednesday**

**Technical sessions 7**

**VIPER II**

10:00 – 10:20	299928	BANDGAP INVESTIGATION OF HIERARCHICAL ISOVOLUMETRIC PERIODIC CORES WITH NEGATIVE POISSON RATIO <i>S. Del Broccolo, M. Ouisse, E. Foltête, F. Scarpa</i>
10:20 – 10:40	300678	RESONANT STOP BAND ANALYSIS USING AN INHOMOGENEOUS RE-ENTRANT HONEYCOMB CORE STRUCTURE <i>MA. Campana</i>
10:40 – 11:00	296766	A CONVOLUTION BASED WAVENUMBER EXTRACTION METHOD <i>R. F. Boukadia, E. Deckers, C. Claeys, W. Desmet, M. Ichchou</i>
11:00 – 11:20	298639	DESIGN GUIDELINES FOR THE ACOUSTIC PERFORMANCE IMPROVEMENT OF A PERIODIC POROUS MATERIAL <i>D. Magliacano, M. Ouisse, S. De Rosa, F. Franco, A. Khelif</i>
11:20 – 11:40	293147	EXPERIMENTAL INVESTIGATION OF REDUCED SOUND TRANSMISSION OF SANDWICH PANELS USING 3D-PRINTED MODELS <i>F. Errico, M. Ichchou, F. Franco, S. De Rosa, P. Giuseppe, O. Bareille</i>

**MATERIALS AND DAMPING**

10:00 – 10:20	300748	SYNTHESIS AND CHARACTERIZATION OF NATURAL FIBERS REINFORCED EPOXY COMPOSITE <i>M. Zhang, M. Salvia, O. Bareille</i>
10:20 – 10:40	293710	EXPERIMENTAL IDENTIFICATION OF VISCOELASTIC PROPERTIES OF VIBRATING PLATES <i>P. Grosso, A. De Felice, S. Sorrentino</i>
10:40 – 11:00	300728	MANUFACTURING TOLERANCE IMPACT ON STATIC CHARACTERISTICS FOR A TILTING PAD JOURNAL BEARING <i>M. Lou, O. Bareille, W. Chai, M. Ichchou, W. Chen</i>
11:00 – 11:20	300793	COMPARISON OF DAMPING PERFORMANCES OF CONSTRAINED VISCOELASTIC LAYERS AND PASSIVE PIEZOELECTRIC NETWORKS <i>L. Rouleau, B. Lossouarn, R. Darleux, JF. Deü</i>
11:20 – 11:40	400002	EXPERIMENTAL STUDY OF GRAPHENE AND CARBON NANOTUBES THERMAL SENSING PROPERTIES <i>D. Passato, M. Akermo, P. Hallander, S. De Rosa, G. Petrone</i>
11:40 – 12:00	297421	REAL-TIME TUNING OF STIFFNESS AND DAMPING PROPERTIES OF LAMINATE COMPOSITES <i>M. Ouisse, P. Butaud, D. Renault, B. Verdin, G. Chevallier</i>

**STRUCTURAL DYNAMICS II**

10:00 – 10:20	296852	PASSIVE VIBRATION CONTROL OF TYRES USING EMBEDDED MECHANICAL RESONATORS <i>F. Errico, G. Petrone, F. Franco, S. De Rosa, M. Ichchou</i>
10:20 – 10:40	300853	SIMPLIFIED 3D TIRE MODEL INFRASTRUCTURE FOR DYNAMIC AND FREQUENCY ANALYSIS <i>V. M. Arricale, A. Sakhnevych, F. Farroni, F. Timpone</i>
10:40 – 11:00	298852	FRICTION POWER LOSSES PREDICTION OF SPUR GEAR PAIRS WITH CONSIDERING DYNAMIC EFFECTS <i>N. Feki, M. Hammami, O. Ksentini, M. S. Abbes, M. Haddar</i>
11:00 – 11:20	430000	DYNAMIC CHARACTERIZATION OF POLYMERIC VIBRATION DAMPERS <i>M. Barbieri, A. De Felice, F. Pellicano, S. Sorrentino, A. Zippo</i>