

MONDAY, JULY 9th

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| 8:30 – 9:00 | WELCOME |
| 9:00 – 9:30 | OPENING SESSION |
| 9:30 – 10:10 | Martin Wegener, Karlsruhe Institute of Technology (Germany), <i>Experiments on 3D mechanical metamaterials.</i> |
| 10:10 – 10:30 | <i>Sequential Mechanical Metamaterials,</i> Martin Van Hecke <i>et al.</i> , Leiden Institute of Physics (Netherlands). |
| 10:30 – 11:00 | COFFEE BREAK |
| 11:00 – 11:20 | <i>Optimal Pentamodes for Guiding Stress,</i> Graeme Milton, University of Utah (USA). |
| 11:20 – 11:40 | <i>New developments towards seismic metamaterials,</i> Philippe Roux, Isterre, Grenoble (France). |
| 11:40 – 12:00 | <i>Seismic isolation of buildings using composite foundations based on metamaterials,</i> Giovanni Finocchio, Unime (Italy). |
| 12:00 – 12:20 | <i>Conversion of surface waves in a forest of trees, a homogenization approach,</i> Agnès Maurel <i>et al.</i> , Institut Langevin (France). |
| 12:20 – 12:40 | <i>Seismic metamaterials: where is the edge?</i> Sébastien Guenneau Institut Fresnel (France). |
| 12:40 – 14:20 | LUNCH BREAK |
| 14:20 – 15:00 | Mathias Fink, CNRS, Institut Langevin (France), <i>Wave Control with 'Time Materials'.</i> |
| 15:00 – 15:20 | <i>Creating Unique Flows and Functions in Microuidics with Phononics,</i> Jon Cooper University of Glasgow (UK). |
| 15:20 – 15:40 | <i>Non-reciprocal elastic wave propagation in piezoelectric phononic crystals with electrical boundary conditions modulated in space and time,</i> Bertrand Dubus, <i>et al.</i> , IEMN, Lille (France). |
| 15:40 – 16:10 | COFFEE BREAK |
| 16:10 – 16:30 | <i>Development and validation of a wideband steerable acoustic metasurface composed of active electroacoustic resonators,</i> Hervé Lissek <i>et al.</i> , École Polytechnique Fédérale de Lausanne (Switzerland). |
| 16:30 – 16:50 | <i>Terahertz acoustics in two-dimensional materials and nanostructures,</i> Anthony Kent, University of Nottingham (UK). |
| 16:50 – 17:10 | <i>Parity-Time Synthetic Phononic Media and non-Hermitian Valley Transport,</i> Johan Christensen, Universidad Carlos III de Madrid (Spain) |
| 17:10 – 17:30 | <i>Elastic and acoustic waves control using adaptive periodic Interfaces,</i> Morvan Ouisse ¹ and Manuel Collet ² , ¹ FEMTO-ST and ² LTDS (France). |
| 18:30 | POSTER SESSION & CHEESE AND WINE PARTY |

TUESDAY, JULY 10th

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| 09:00 – 09:40 | Davide Bigoni, Universita' di Trento (Italy), <i>Investigation of singular behaviours for flutter instability and configurational forces in structural dynamics"</i> |
| 09:40 – 10:00 | <i>Extensive tailorability of sound absorption using acoustic metamaterials,</i> Abdelkrim Khelif, Institut FEMTO-ST (France). |
| 10:00 – 10:20 | <i>Push me, pull me far and wide: Double Negative Mechanical Metamaterials,</i> Andrew Alderson Sheffield Hallam University (UK). |
| 10:20 – 11:00 | COFFEE BREAK |
| 11:00 – 11:20 | <i>Graded mechanical sub-resonant arrays for mode conversion,</i> Daniel Colquitt, University of Liverpool (UK). |
| 11:20 – 11:40 | <i>Full Control of Lamb Modes in Phononic Crystal Plates,</i> Daniel Torrent, Universitat Jaume I (Spain). |
| 11:40 – 12:00 | <i>A metamaterial approach to the cochlear wave,</i> Fabrice Lemoult et al., Institut Langevin (France). |
| 12:00 – 12:20 | <i>Hierarchy, shape change and fractality: their use to design metacompliance and energy dissipation,</i> Fabrizio Scarpa, University of Bristol (UK). |
| 12:20 – 14:00 | LUNCH BREAK |
| 14:00 – 14:40 | Ping Sheng, Hong Kong University of Science and Technology, <i>Acoustic Metamaterials with Ultra-broadband Absorption and Minimum Thicknesses</i> |
| 14:40 – 15:00 | <i>Non-separability of elastic states in scalable multipartite elastic systems,</i> Pierre Deymier, University of Arizona (USA). |
| 15:00 – 15:20 | <i>Design, manufacture and application of digital space-coiling metasurfaces,</i> Bruce Drinkwater, University of Bristol (UK). |
| 15:20 – 15:50 | COFFEE BREAK |
| 15:50 – 16:10 | <i>Metadiffusers, deep subwavelength acoustic diffusers,</i> Vicente Romero-Garcia, Laboratoire d'Acoustique de l'Université du Mans (France). |
| 16:10 – 16:30 | <i>Effective boundary conditions for acoustic metasurface with strong near field interactions,</i> Olga Umnova, University of Salford (UK) |
| 16:30 – 16:50 | <i>Tunable metasurfaces for elastic waves: numerical simulations and experiments,</i> Andrea Colombi, ETH Zurich (Switzerland). |
| 16:50 – 17:10 | <i>Manipulating Sound with Acoustic Metamaterials,</i> Alastair Hibbins, University of Exeter (UK). |
| 17:10 – 17:30 | <i>Soft Opals beyond Hypersonic Phononics,</i> Georges Fytas, Max Planck Institute for Polymer Research (Germany). |
| 20:00 | GALA DINNER |

WEDNESDAY, JULY 11th

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| 9:00 - 09:40 | Jensen Li, University of Birmingham (UK), <i>Space-coiling metamaterials: from negative refraction to generating wave illusion.</i> |
| 09:40 - 10:00 | <i>Metamaterial plates for controlling flexural waves at low frequencies,</i> José Sanchez-Dehesa, Valence (Spain). |
| 10:00 - 10:20 | <i>Soft Acoustic Metamaterials: from 3D locally resonant metafluids to soft porous gradient index metasurfaces,</i> Thomas Brunet et Olivier Poncelet, I2M, Bordeaux (France). |
| 10:20 - 10:50 | COFFEE BREAK |
| 10:50 - 11:10 | <i>Asymptotically discrete phononic crystals formed by closely spaced cylinders and perforated boxes,</i> Ory Schnitzer et al. Imperial College, London (UK). |
| 11:10 - 11:30 | <i>Observation of a phononic quadrupole topological insulator,</i> Sebastian Huber, ETH Zurich (Switzerland). |
| 11:30 - 11:50 | <i>A hybrid Wave Based-Finite Element unit cell method to predict the sound transmission loss of locally resonant metamaterials,</i> Claus Claeys, KU Leuven (Belgium). |
| 11:50 - 12:10 | <i>Chiral elastic multi-structures and their applications in the wave control for metamaterials,</i> Alexander Movchan, University of Liverpool (UK). |
| 12:10 - 12:30 | CLOSING SESSION |