TIME		
10:30AM–12:15PM	**1-5-6 EXPERIMENTAL PHONONICS** **ROOM 121A** *Session Organizer: Victor Sanchez-Morcillo, Universitat Politecnica De Valencia, Gandia, Spain* *Session Co-Organizer: Mahmoud Hussein, University of Colorado, Boulder, CO, United States* **10:30AM – Multi-layer locally resonant meta-material acoustic barriers: To large scale testing and beyond...** **Technical Presentation.** IMECE2016-66342 – *Andrew J Hall, Emilio P. Calius, Callaghan Innovation, Auckland, New Zealand, George Dodd, University of Auckland, Auckland, New Zealand* **10:51AM – Experimental study of the transmission spectrum of a sonic/ultrasonic acoustic metamaterial** **Technical Paper Publication.** IMECE2016-67140 – *Yanbo He, University of Pittsburgh, Pittsburgh, PA, United States, Jeffrey Vipperman, Univ Of Pittsburgh, Pittsburgh, PA, United States* **11:12AM – Contact-Based and Spheroidal Vibrational Dynamics of a Two-Dimensional Micro-Granular Crystal Studied with Laser-Induced Transient Gratings** **Technical Presentation.** IMECE2016-67481 – *Alejandro Vega-Flick, CINVESTAV, Merida, Yucatan, Mexico, Ryan A. Duncan, Alexei A. Maznev, Massachusetts Institute of Technology, Cambridge, MA, United States, Samuel Wallen, Nicholas Boechler, University of Washington, Seattle, WA, United States, Christian Stelling, Markus Retsch, University of Bayreuth, Bayreuth, Germany, Juan J. Alvarado-Gil, CINVESTAV, Merida, Mexico, Keith A. Nelson, Massachusetts Institute of Technology, Cambridge, MA, United States* **11:33AM – Application of Phononic Crystals in Engineering of Mechanical Quality Factors of Micro-Toroidal Optomechanical Resonators** **Technical Presentation.** IMECE2016-67793 – *Seyedhamidreza Alaie, Weill Cornell Medicine, New York, NY, United States, Mani Hossein-Zadeh, Mohamedhosein Baboly, Mohammad Reza Zamani, University of New Mexico, Albuquerque, NM, United States, Simon Dunham, Weill Cornell Medicine, New York, NY, United States, Zayd Leseman, University of New Mexico, Albuquerque, NM, United States*	**1-5-7 EXOTIC LATTICES IN PHONONICS** **ROOM 121B** *Session Organizer: Srikantha Phani, University of British Columbia, Vancouver, BC, Canada* *Session Co-Organizer: Mahmoud Hussein, University of Colorado, Boulder, CO, United States* **10:30AM – Tunable Wave Dynamics in Origami-based Mechanical Metamaterials** **Technical Presentation.** IMECE2016-65457 – *Hiromi Yasuda, Mia Lee, Jinkyu Yang, University of Washington, SEATTLE, WA, United States* **10:51AM – Transformable Origami-inspired Acoustic Waveguides** **Technical Presentation.** IMECE2016-65695 – *Sahab Babaee, Johannes B. Overvelde, Elizabeth R. Chen, Vincent TOURNAT, Katia Bertoldi, Harvard university, Cambridge, MA, United States* **11:12AM – Kirigami-inspired Elastic Hyperbolic Metamaterial for Subwavelength Flexural Wave Control** **Technical Presentation.** IMECE2016-68755 – *Rui Zhu, Hiromi Yasuda, Jinkyu Yang, University of Washington, Seattle, WA, United States* **11:33AM – Manipulation of elastic waves in graded mechanical metamaterials** **Technical Presentation.** IMECE2016-67644 – *Eunho Kim, Chonbuk National Univeristy, Jeonju-si, Jeollabuk-do, Korea (Republic), Rajesh Chaunsali, Sean Eunsik Phenisee, Jinkyu Yang, University of Washington, Seattle, WA, United States* **11:54AM – Active Tunable Stop Band of Piezoelectric Phononic Crystal By Negative Capacitance Circuit** **Technical Presentation.** IMECE2016-65935 – *Yi-Ze Wang, Yue-Sheng Wang, Beijing Jiaotong University, Beijing, Beijing, China*
	1-5-9 NONLINEAR PHONONICS **ROOM 121C** *Session Organizer: Victor Sanchez-Morcillo, Universitat Politecnica De Valencia, Gandia, Spain* *Session Co-Organizer: Mahmoud Hussein, University of Colorado, Boulder, CO, United States* **10:30AM – Foundational principles for nonlinear dispersive elastic waves in homogeneous and periodic media** **Technical Presentation.** IMECE2016-67118 – *Romik Khajehtourian, University of Colorado Boulder, Boulder, CO, United States, Mahmoud Hussein, University of Colorado, Boulder, CO, United States* **10:51AM – The Effects of Cubic Stiffness Nonlinearity on the Attenuation Bandwidth of 1D Elasto-dynamic Metamaterials** **Technical Paper Publication.** IMECE2016-66359 – *Arnab Banerjee, The University of Auckland, Auckland, Auckland, New Zealand, Emilio P. Calius, Callaghan Innovation, Auckland, New Zealand, Raj Das, University of Auckland; Dept of Mechanical Engrg, Auckland, New Zealand* **11:12AM – Realizing a Nonlinear Mechanical Metamaterial Unit** **Technical Presentation.** IMECE2016-66448 – *Andrew J Hall, Callaghan Innovation, Auckland, New Zealand, Arnab Banerjee, The University of Auckland, Auckland, Auckland, New Zealand, Emilio P. Calius, Callaghan Innovation, Auckland, New Zealand, Raj Das, University of Auckland; Dept of Mechanical Engrg, Auckland, New Zealand* **11:33AM – Experimental Evidence of Modal and Directional Mixing in Nonlinear Lattices** **Technical Presentation.** IMECE2016-66239 – *Ganesh Ramakrishnan, Stefano Gonella, University of Minnesota, Minneapolis, MN, United States* **11:54AM – Surface Acoustic Wave Propagation in Self-Assembled Multilayer Microscale Granular Crystals** **Technical Presentation.** IMECE2016-67408 – *Amey Khanolkar, Maroun Abi Ghanem, Nicholas Boechler, University of Washington, Seattle, WA, United States*	**1-7-1 AERO-ACOUSTICS AND SOUND PROPAGATION** **ROOM 122A** *Session Organizer: Zhongquan Charlie Zheng, University of Kansas, Lawrence, KS, United States* *Session Co-Organizer: Brent Paul, Alion Science & Technology, McLean, VA, United States* **10:30AM – Time-Domain Simulation of Ultrasound Propagation with Fractional Laplacian** **Technical Paper Publication.** IMECE2016-65966 – *Junjian Zhang, Guoyi Ke, Zhongquan Charlie Zheng, University of Kansas, Lawrence, KS, United States* **10:51AM – Effect on Sound Source Drift Caused by Angles between Jet Flow Direction and Microphone Array or Sound Source Plane** **Technical Paper Publication.** IMECE2016-66099 – *Zhe Shen, Yigang Wang, Yang Zhigang, Tongji University, Shanghai, China* **11:12AM – Compressible 2D flow field interaction of two contra-rotating blades** **Technical Paper Publication.** IMECE2016-67449 – *Natasha Barbely, NASA, Moffett Field, CA, United States, Narayanan Komerath, Georgia Institute of Technology, Atlanta, GA, United States* **11:33AM – Spacetime discontinuous Galerkin method for wave propagation simulation in complex media** **Technical Presentation.** IMECE2016-68547 – *Reza Abedi, University of Tennessee Space Institute, Tullahoma, TN, United States*