



December 05, 2021

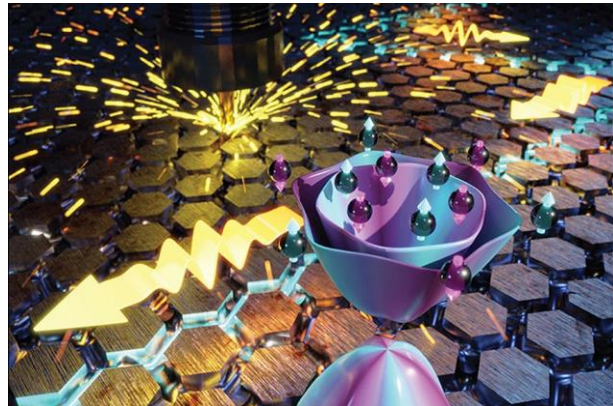
**Two Ph.D. positions available in the area of  
“Acoustic and Elastic Metamaterials”**



Two Ph.D. positions are available in the Laboratory within the School of Mechanical Engineering at Purdue University (West Lafayette, IN, USA).

These positions are specifically targeted to the **design, simulation, and fabrication of acoustic and elastic metamaterials** for a variety of applications in mechanical and aerospace engineering ranging from noise and vibration control to analog computing platforms. While these positions are broad in scope and focus on aspects of fundamental science and novel material discovery, they will have particular emphasis on the rapidly growing field of topological mechanical metamaterials, which is a research area at the intersection of continuum and quantum mechanics.

Structural Health Monitoring and Dynamics



The ideal candidate should have an undergraduate (B.S.) or graduate (M.S.) degree in Mechanical Engineering, Aerospace Engineering, Applied Physics, Applied Mathematics, or a closely related field of engineering and science. Candidates should have deep interest (and possibly some background) in theoretical and computational mechanics, quantum and condensed matter physics, design, fabrication, and experimental testing of materials. The tentative starting date is either Summer or Fall 2022. Earlier starting dates can be discussed.

Candidates interested in this opportunity should contact Prof. Semperlotti by email. The email should include an updated resume and use as subject: SHMD\_Meta\_PhD\_”Name\_of\_applicant”.

Fabio Semperlotti  
Professor, School of Mechanical Engineering  
Professor (by courtesy), School of Aeronautics and Astronautics  
Purdue University, West Lafayette, IN 47907  
Email: [fsemperl@purdue.edu](mailto:fsemperl@purdue.edu)  
SHMD website: <https://engineering.purdue.edu/~fsemperl/>