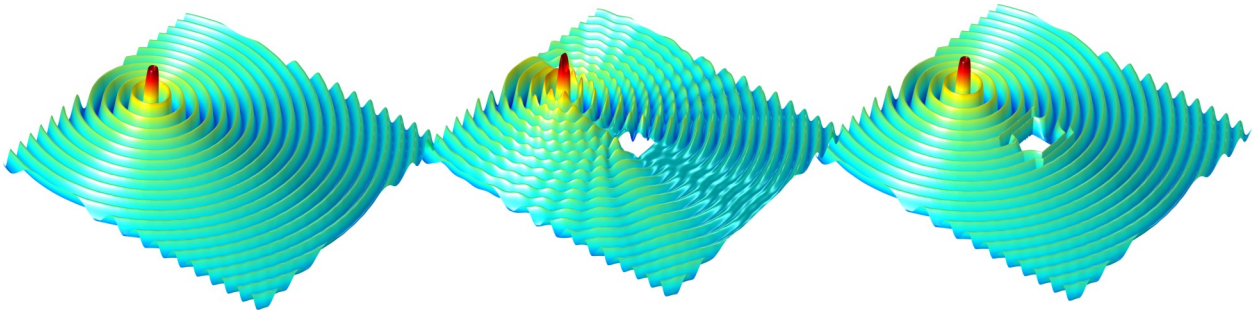
UNIVERSITÀ
DEGLI STUDI DI TRIESTE

Dipartimento di Ingegneria e Architettura

SEMINARIO

Novel concepts for the mechanical design of smart and meta-materials



Venerdì 29 giugno 2018, ore 10.00-12.00

Aula C Edificio C9

Meta-materials and **soft smart materials** are hot research topics justified by the need to provide solutions to technological challenges such as vibration mitigation in mechanical systems, efficient green mechanical-to-electrical energy conversion (energy harvesting), manufacture of soft robots.

Among other examples, the dynamic characteristics of a novel waveguide based on a quasicrystalline micro-structure will be shown, how to engineer a metamaterial cloaking plate able to steer flexural waves, how to achieve enhanced negative refraction in Fibonacci laminates and new actuation modes for dielectric elastomer transducers.

Massimiliano Gei *is full professor of Solid Mechanics and Structures, School of Engineering at the University of Cardiff (UK) where, since 2016, he is Leader of the Applied and Computational Mechanics group and Deputy Head of Mechanics, Materials and Advanced Manufacturing research theme.*