



# Additively manufactured meta-(bio)materials

**June 9<sup>th</sup>, 2017**  
**2:00 pm**

Sala Consiglio  
Dipartimento di Meccanica  
Via La Masa 1, Milano

## **Abstract**

The lecture will cover different aspects of metamaterials particularly for applications in biomechanics and biomedical engineering including tissue regeneration and infection prevention.

Since most relevant designs of metamaterials require complex geometries that could only be realized using additive manufacturing, there is an intimate connection between the design of metamaterials and additive manufacturing technologies. The relevant additive manufacturing technologies and their potential for fabrication of metamaterials will be therefore discussed.

The mechanical, physical, and biological properties of additively manufactured metamaterials will be also covered so as to highlight the latest results and trends.

## **Speaker short CV**

Amir Zadpoor is an Associate Professor and Chair of Biomaterials and Tissue Biomechanics section at Department of Biomechanical Engineering, Delft University of Technology.

He obtained his PhD (cum laude) from the same university, and is currently interested in additive manufacturing of biomaterials, meta-materials, mechanobiology, and tissue regeneration. Prof. Zadpoor has received several international and national awards including an ERC grant, a Veni grant, and the Early Career Award of the Journal of the Mechanical Behavior of Biomedical Materials.

He has also served on the editorial boards of international journals, on the review panels of funding agencies, and as a member of award committees.