

## Webinar series on

# Multiscale Modeling of Rubber-Like Materials

June 07 2021, 15:30 (link zoom: <https://zoom.us/j/93172428683?pwd=eEY2RXduWnU4NjVlZzQ4R3gyZ29Ldz09>)

June 08 2021, 15:30 (link zoom: <https://zoom.us/j/97771261848?pwd=RUIyTFQ1cmdET3Y0OUR6QWxzOUUpQZz09>)

## Giuseppe Saccomandi

Professor of Applied Mathematics, Department of Engineering, University of Perugia

This seminar series surveys multi-scale approaches for the modelling of rubber-like and soft materials and compare them with classical macroscopic phenomenological models. Our aim is to show how it is possible to obtain practical mathematical models for the mechanical behavior of these materials incorporating mesoscopic (network scale) information. Multi-scale approaches are crucial for the theoretical comprehension and prediction of the complex mechanical response of these materials. Moreover, such models are fundamental in the perspective of the design, through manipulation at the micro- and nano-scales, of new polymeric and bioinspired materials with exceptional macroscopic properties.

