



Italian Chapter of the European Society of Biomechanics

**LIVE ON AIR**

**23-24 September 2021  
MS TEAMS**

## PROGRAM

### Day 1: Thursday September 23rd, 2021

14:30 - 14:40	<b>Opening</b>	<b>Chairs:</b> Michele Marino, Simona Celi, Claudio Chiastra
	<b>Project presentation</b>	
14:40 - 15:00	Emanuele Luigi Carniel <i>Università di Padova</i>	CECOMES
	<b>Oral session: Musculoskeletal biomechanics</b>	
15:00 - 15:15	Annamaria Guiotto <i>Università di Padova</i>	Finite element assessment of diabetic foot insoles
15:15 - 15:30	Giorgio Cassiolas <i>Università di Brescia</i>	How the introduction of subject-specific musculoskeletal models affects the estimation of knee joint reaction forces
15:30 - 15:45	Alessandro Sicilia <i>Università di Salerno</i>	Numerical lubrication modeling of total hip replacements coupled with musculoskeletal multibody dynamics
15:45 - 16:00	Lorenzo Rum <i>Università degli Studi di Roma "Foro Italico"</i>	Anticipatory Postural Adjustments During Gait Initiation in People with Mild Chronic Low Back Pain
16:00 - 16:15	<b>Break</b>	
	<b>Master Thesis Award (finalists)</b>	
16:15 - 16:30	Giulia Cavazzoni <i>Alma Mater Studiorum - Università di Bologna</i>	In vitro characterization of the three-dimensional strain pattern in human vertebrae affected by metastases
16:30 - 16:45	Leonardo Molinari <i>Università Campus Bio-Medico di Roma</i>	Multi-Field Material Modeling and Computational Implementation of Cardiac Ablation
16:45 - 17:00	Sofia Pettenuzzo <i>Università di Padova</i>	Computational methods for the characterization of the mechanical behaviour of healthy and tumour cells
17:00 - 17:10	<b>Closing remarks</b>	

### Day 2: Friday September 24th, 2021

	<b>Project presentation</b>	
14:30 - 14:50	Alfons Hoekstra <i>University of Amsterdam</i>	In Silico World
	<b>Oral session: Cardiovascular biomechanics</b>	
14:50 - 15:05	Alice Fantazzini <i>Università di Genova</i>	Deep Learning to Support Endovascular Surgical Procedures
15:05 - 15:20	Martino Andrea Scarpolini <i>Fondazione Toscana Gabriele Monasterio</i>	An automatic Deep Learning pipeline for real time digital twin of Aortic Aneurysm

15:20 - 15:35	Simone Saitta <i>Politecnico di Milano</i>	A Fully Automated Pipeline for Thoracic Aorta Geometric Analysis and TEVAR planning from Computed Tomography using Deep Learning
15:35 - 15:50	Alessandro Nitti <i>Politecnico di Bari</i>	A coupled isogeometric framework for the electromechanical activation of thin tissues
15:50 - 16:00	<b>Break</b>	
	<b>Oral session: Tissue engineering</b>	
16:00 - 16:15	Stefano Gabetti <i>Politecnico di Torino</i>	Bioreactor platform combining perfusion and PEMF stimulation for in vitro bone research
16:15 - 16:30	Beatrice Belgio <i>Politecnico di Milano</i>	Towards retina biofabrication
16:30 - 16:45	Cristiana Giordano <i>Università di Pisa</i>	Magneto-responsive core-shell microbeads for engineering peristalsis and alveolar breathing in-vitro
16:45 - 17:00	Bastien Sauty <i>ENS Paris Saclay</i>	Enabling technologies for stiffness gradients in GelMA hydrogels obtained via microfluidic dynamic mixing
	<b>Project presentation</b>	
17:00- 17:20	Nils Götzen <i>4realsim</i>	SimInSitu
17:20 - 17:30	<b>Break</b>	
17:30 - 18:15	<b>General Assembly, Voting results and Master Thesis Award announcement</b>	