

Soft Wearable Robotics Solutions for Hand Theranostics

SAILOR project - Interim Workshop

Organized by

Michela Borghetti, University of Brescia
Mauro Serpelloni, University of Brescia
Mihai Dragusanu, University of Siena
Monica Malvezzi, University of Siena
Angela Palomba, University of Naples Federico II
Teodorico Caporaso, University of Naples Federico II
Giuseppe Di Gironimo, University of Naples Federico II

Date

May 22, 9.30 AM - 12:30 PM

Link Google Meeting

<https://meet.google.com/vib-qhzn-aeg>

Program

9.30-10:15 Clinical requirements for soft wearable robotic solutions

9.30-9.35 Introduction
9.35-9.55 Presentation 1: Soft wearable robotic glove for hand theranostics: use cases and clinical requirements, A. Palomba, University of Naples Federico II
9.55-10.15 Presentation 2: Spasticity and robotics, F. Sirico, University of Naples Federico II
10.15-10.20 Break

10:20-11:05 Soft bending actuators for wearable applications

10.20-10.25 Introduction
10.25-10.45 Presentation 1: Design and Development of a Fiber-Reinforced Silicone Pneumatic Actuator System for a Soft Hand Exoskeleton by G. Di Gironimo, University of Naples Federico II
10.45-11.05 Presentation 2: Soft grippers for industrial applications by Stanislao Grazioso, University of Naples Federico II
11.05-11.15 Break

11:15-12:00 Sensing systems for wearable applications

11.15-11.20 Introduction
11.20-11.40 Presentation 1: Printed strain gauges and capacitive pressure sensors for wearable applications, by Giona Bonomi, Michela Borghetti, Mauro Serpelloni, University of Brescia
11.40-12.00 Presentation 2: Printed sensors for wearable devices and smart objects: intelligence from sensing, by Sarah Tonello e Tiziano Fapanni, University of Brescia
12.00-12.05 Break

12:05-12:45 Cutaneous devices for wearable pressure and vibration stimulation

12.05-12.10 Introduction
12.10-12.30 Presentation 1: Cutaneous haptics for robotics and immersive realities by Claudio Pacchierotti, Centre National de la Recherche Scientifique (CNRS), Rennes, France
12.30-12.45 Presentation 2: When skin that beats like a heart: the wearable robot fighting cancer by Domenico Prattichizzo, University of Siena