

# 1<sup>st</sup> online European PhD days on Miniaturized Robotics

17<sup>th</sup>  
Nov.  
21

## SCIENTIFIC PROGRAM

9:15 - 9:30 Welcome talk

9:30 - 10:30 1<sup>st</sup> Session

First name	Last name	Affiliation	Poster Title
Nihal Olcay	Dogan	Max-Planck Institute for Intelligent Systems	3D Printed Personalized Magnetic Micromachines from Patient Blood-derived Biomaterials
Stefano	Pane	Scuola Superiore Santanna	Advanced ultrasound tracking of microrobots in tissue based on motion-enabled contrast-enhancement
Cerine	Mokhtari	IEMN Univ Lille	Automated and Robotic On-wafer Probing Station for High Frequency Measurements and Metrology
Alexis	Lefevre	FEMTO-ST	Closed-loop Control of Particles based on dielectrophoretic actuation
Tianlu	Wang	Max Planck Institute for Intelligent Systems; ETHZ	Larval Fish-inspired Efficient Undulatory Swimming
Charlie	Maslen	University of Chemistry and Technology Prague	Light-Powered Hydrogel Microrobots
Karim	Botros	Insa centre val de Loire	Micro robot detection and tracking using deep learning
Ali	Zarei	Tampere University (TAU)	Micro-robotics for Mechanical Characterization of Bio-based Fibers
Ogulcan	Isitman	Aalto University	Non-Contact Cooperative Manipulation of Magnetic Microparticles Using Two Robotic Electromagnetic Needles
Nahashon	Osinde	FEMTO-ST	Quantitative and experimental assessment of optical coherence tomography volumes obtained using non-raster trajectories
Zhiyuan	Zhang	ETHZ Acoustic Robotics Systems Lab (ARSL)	Rolling microswarms along acoustic virtual wall
Benjamin	Mauze	FEMTO-ST	Study and Development of Micropositioning Parallel Continuum Robot
Ivan	Tchouatat Kepsu	FEMTO-ST	Trajectory planning for 3D dexterous in-hand robotic micro-manipulation

# SCIENTIFIC PROGRAM

**10:30 - 11:00 Networking session**

**11:00 - 12:00 2<sup>nd</sup> Session**

First name	Last name	Affiliation	Poster Title
Giovanni	Faoro	The BioRobotics Institute, Scuola Superiore Sant'Anna	AI integrated robotic platform for magnetic microrobots teleoperation
Gaurav	Gardi	Max Planck Institute for Intelligent Systems	Collective system with reconfigurable behaviours and functions at the micro-metre scale
Diluka	Harischandra	Aalto University	Ferrofluidic Manipulator: Automatic Manipulation of Nonmagnetic Microparticles at the Air-Ferrofluid Interface
Mouna	Ben Salem	LIRMM	Microbiota Sampling Capsule Based on a 3D printed Bistable Mechanism
Mert	Şener	Ege University	Microrobot Design for Magnetic Particle Imaging Integrated Electromagnetic Actuator System
Maxence	Leveziel	FEMTO-ST	Modeling, design and control of miniaturized parallel soft robots with configurable platforms
Mehmet Efe	Tiryaki	Max-Planck Institute for Intelligent Systems	MRI-servoing of Magnetic Microrobots
Yuning	Lei	FEMTO-ST	Nanorobotic Origami unfolded at the Tip of Optical Fiber
Artur	Kopitca	Aalto University	Programmable assembly of particles on a Chladni plate
Marie	Daubresse-Chasle	FEMTO-ST	Simultaneous localisation and mosaicking for a pack of endoscopic microcapsules
Cornel	Dillinger	ETHZ Acoustic Robotics Systems Lab (ARSL)	Starfish-inspired Ultrasound-driven Soft Microrobot
Franco	Pinan Basualdo	FEMTO-ST & Université Libre de Bruxelles	Thermocapillary micromanipulation at the air-water interface
Alexia	Del Campo Fonseca	ETHZ Acoustic Robotics Systems Lab (ARSL)	Ultrasound-controlled Swarmbots in Physiological flows - SONOBOTS