

Colloquium Thermo- and Fluid Dynamics

Microswimmers and tweezers of the future - ultrasound technology

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Precise, accurate, and wireless controlled motion of microswimmers can create new and exciting opportunities in targeted and precise delivery of drugs or genes, transducing forces on specific cells or tissues, performing biopsies, and use in non-invasive surgery. Ultrasound is an attractive modality for controlling micro and nanoswimmers due to penetrating deep into tissue, not being affected by the opaque nature of animal bodies, and generating a broad range of forces. In this talk, I will describe some of the ultrasound-based swimmers and in vivo manipulation systems we are currently developing at the Acoustic Robotics Systems Lab (ARSL).



Date: Wednesday, 23 March 2022

Time: 16:15 - 17:15h

Place: ETH Zurich, ML H 44

Host: Prof. Filippo Coletti, IFD