

Kolloquium Thermo- und Fluiddynamik

From disease transmission to fluid dynamics and back

Prof. Lydia Bourouiba

The Fluid Dynamics of Disease Transmission Laboratory

Massachusetts Institute of Technology

Infectious disease transmission involves interactions of pathogens with a complex fluid phase such as in isolated droplets or multiphase turbulent clouds. This is true for human exhalations, bursting bubbles, or impacting raindrops, all generating airborne pathogens. Our mechanistic understanding of how pathogens successfully and sustainably transfer from one host or reservoir to the next remains woefully limited, with the global consequences that we are all experiencing with the ongoing pandemic. In this talk, I will highlight how studying such health questions can lead to fundamentally new insights on a broad class of fluid problems, including those in which unsteadiness and mixing are at the core.

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Place: ETH Zurich, ML H 44 Host: Prof. Filippo Coletti, IFD Mandatory COVID certificate

