

*Institute of Energy Technology: Prof. R.S. Abhari (LEC), Prof. K. Boulouchos (LAV)
Prof. Ch. Müller (ESE), Prof. N. Noiray (CAPS), Prof. D. Poulikakos (LTNT)
Prof. H.-M. Prasser (LKE), Prof. A. Steinfeld (PREC)
Institute of Mechanical Systems: Prof. G. Haller (NDS)
Institute of Fluid Dynamics: Prof. P. Jenny, Prof. T. Rösgen, Prof. O. Supponen (IFD)*

17/06/2020

I N V I T A T I O N

to a talk as part of the

Colloquium Thermo- and Fluid Dynamics

- Date:** Wednesday, June 24, 2020
Time: 16:15h
Place: online via [zoom](#), meeting ID: 931 6153 3270 & password: ktf or [link](#)
Speaker: Prof. Alberto Giacomello
Dipartimento di Ingegneria Meccanica e Aerospaziale,
Sapienza Università di Roma
Title: Cavitation in nanoconfinement: perpetual superhydrophobicity,
nanobubbles, and more

What is the behavior of fluids in nanoscale confinement? How is the phase behavior of liquids altered at hydrophobic surfaces and in nanoscale cavities? Molecular dynamics is the tool of choice to answer to such questions of paramount importance in engineering, physics, and biology. The main computational challenge in this field is coping with the multiple length and time scales characteristic of the behavior of fluids in extreme confinement.

In this talk, I will discuss results from molecular dynamics simulations equipped with rare-event tools in the field of superhydrophobic surfaces, nanobubbles, and liquid intrusion and extrusion in hydrophobic nanopores.

Hosts: PD Dr. D. Meyer-Masseti, Prof. O. Supponen

Guests are welcome!