SEMPARIS – Séminaires en région parisienne

http ://string.lpthe.jussieu.fr/semparis/

Colloquium Pierre et Marie Curie

Jeudi 27 Mars 2025, 17 :00
UFR-PHYS-SU, Amphi 25 Campus Pierre-et-Marie-Curie, Jussieu
Domaines : astro-ph—cond-mat—gr-qc—hep-ex—hep-lat—hep-ph—hep-th—physics—quant-ph

Titre : *La mécanique moléculaire des fluides*

Orateur : **Lydéric Bocquet (LPENS, Académie des Sciences)**

Résumé : *The emerging field of nanofluidics explores the molecular mechanics of fluids at the smallest scales. This realm of the "infinitely small in fluidics" is the frontier where the continuum of fluid dynamics meets the atomic nature of matter, and even its quantum nature. Observations unveil a cabinet of curiosities of singular properties : nearly frictionless flows, emerging quantum effects, or neuromorphic behaviors that makes it possible to dream of ionic computers. But beyond the scientific intrigue, these manifold nanoscale properties can also be used to develop breakthrough innovations in the water and energy sectors, for desalination, water remediation or osmotic energy. These are all assets to meet the challenges facing the planet.*