

LadHyX Seminar – February 20th, 10:45

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Gas bubble dynamics

The motion of gas bubbles in liquids plays a vital role in numerous natural, industrial, and everyday phenomena. Unlike solid particles, gas bubbles are nearly weightless and highly responsive to forces from the surrounding fluid. Their dynamics are affected by added mass acceleration and deformable surfaces, and also by interactions with turbulent flows, other bubbles, and walls, with liquid rheology and surfactants further influencing their behavior. In this talk, the intricate behavior of noncondensable gas bubbles will be highlighted, covering the effect of turbulence, non-Newtonian fluids, and electrolytes.