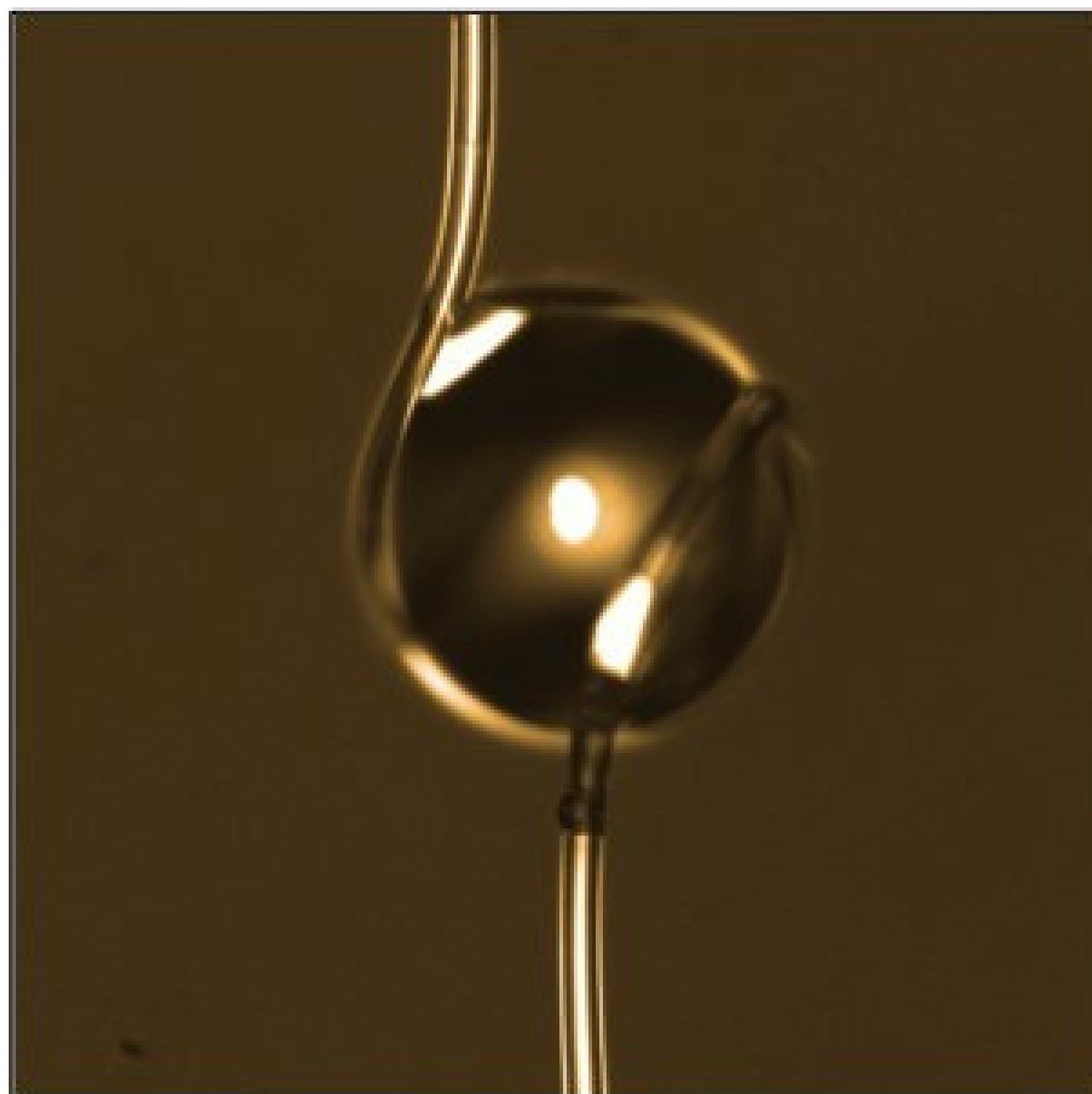




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Soft Materials at surfaces and interfaces: Elastocapillarity



The physics of soft materials is distinct from hard matter as the weaker intermolecular bonds can result in a large response to external stresses. In recent years, there has been a significant interest in understanding the interaction between a liquid's surface tension and a solid's elasticity: elastocapillarity. In particular, liquids can generate significant deformations of highly compliant materials. These elastocapillary interactions are highly relevant in a wide variety of systems including capillary origami, kirigami, and folding, soft tissues, wetting of fibers and hair, and micro-patterning of soft surfaces. In this talk I will summarize our recent work on the capillary interactions of liquid droplets with elastic surfaces.