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**Single bubble impacting a curved surface.** ANUJ BASKOTA, ALIREZA HOOSHANGINEJAD, EHSAN ESMAILI, SUNGHWAN JUNG, Cornell University — Bubbles have played an important role in understanding different applications ranging from chemical processing to ship-turbine manufacturing. In many of these systems, hydrodynamic interactions between bubbles and surfaces are important to understand their performance and efficacy. Here, we investigate the dynamics of a single bubble bouncing and moving along curved surfaces of different radii. Parallel and normal velocities of the bubbles were measured at different bubble speeds to explore their interactions with a curved surface. Their motion will be predicted by considering the inertia, the hydrodynamic drag, and the lubrication film. Finally, based on the kinematics of bubbles, we will briefly discuss its potential applications like cleaning curved surfaces such as fruits.

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