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Viscous Bouncing ADITYA JHA, PIERRE CHANTELOT, Physique et Mecanique des Milieux Heterogenes (PMMH), CHRISTOPHE CLANET, LadHyX, cole polytechnique, DAVID QUR, Physique et Mecanique des Milieux Heterogenes (PMMH) — Water drops impacting a superhydrophobic surface exhibit bouncing due to the inherent repellency of the substrate. This repellency persists even when the liquid viscosity is increased by two orders of magnitude. We show a way to predict the limiting bouncing viscosity. Furthermore, we discuss the variation of the contact time and elasticity of the rebound until viscosity eventually suppresses it entirely.

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