**The air-cushioning under an impacting highly viscous drop**

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The impact of a drop on a flat dry surface always entraps a bubble under its center. The lubrication pressure in the air-layer deforms the bottom of the drop making the first contact occur, not at a point, but along a ring, thus entrapping an air disc. Using an ultra-high-speed video camera, capable of 5 million fps, we use interferometry to extract the time-resolved shape evolution of this disc. For impacts of water drops under atmospheric conditions we see excellent agreement with theoretical predictions for the disc thickness and radial extent. Here we focus on the effect of increasing the drop viscosity on the air layer. For very high viscosities we see no immediate contact with the solid and the drop glides on the air-layer, forming an extended thin film. This air film ruptures at random locations wetting the substrate. The spreading speed of the wetting spots is much larger than predicted by available theory and rarified gas effects may play a role.