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Comparison of lateral retention forces for sessile and pendant water drops on a solid surface¹ THOMAS MICHEL², Lamar University Department of Physics (Undergrad Student) — A sessile drop is produced by placing the drop on top of a solid surface and a pendant drop is produced by placing the drop on the bottom of the surface. When we place both of these drops on a Plexiglas surface, and then we spin the surface with an increasing angular velocity, one would expect the pendant drop to be easier to slide off the surface. On the contrary, the pendant drop is harder slide. This effect was first discovered in [R. Tadmor et al, Phys. Rev. Lett. 103, 266101 (1999)], and it has been recently demonstrated using a very simple apparatus in [R. de la Madrid et al, Am. J. Phys. 83, 531 (2015)]. However, there is still not known why the effect happens. In this talk, I will present an experimental arrangement that "The Drop Team" intends to use to elucidate the origin of this effect.

¹Comparison of lateral retention forces for sessile and pendant water drops on a solid surface

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