



# Unsteady soft wetting: from wetting ridge formation to stick-slip dynamics

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## Abstract:

A soft solid surface deforms when it is wetted by liquid. The deformation at the three-phase contact-line is often called a wetting ridge, which can grow up to a few micrometers as the liquid spreads on the soft surface. Depending on the surface wettability and its stiffness, liquid spreading starts out smoothly at the beginning and then transitions to an intermittent phase where it alternates between sticking and slipping. In this talk, I will discuss our experimental and theoretical effort in understanding the early formation stage of a wetting ridge, as well as its role in the subsequent stick-slip cycles.