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**The Influence of Geometry on The Gel-Liquid Contact Line** SHIH-YUAN CHEN, KAREN DANIELS, North Carolina State Univ — A sufficiently soft solid, such as gel, can be deformed by surface tension when in contact with a liquid, an effect known as elastocapillarity. It remains an open question whether the force at the gel-liquid contact line depends on the geometry, chemical composition, and/or the Poisson ratio of the gel. In our experiments, we focus on three distinct geometries: (1) a droplet on a soft substrate, (2) a gel thread immersed in a liquid bath, and (3) liquid within a single pore of the gel. We quantify how the internal strain is influenced by the choice of geometry and chemical composition.

Shih-Yuan Chen  
North Carolina State Univ

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