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Relationship between the lateral works of adhesion and the Young-Dupre equation. RAFAEL DE LA MADRID, HUY LUONG, JACOB ZUMWALT, Department of Physics, Lamar University — The Young-Dupre work of adhesion quantifies the energy necessary to detach a liquid drop from a solid substrate. In this talk, we will calculate the energy necessary to contract/expand/slide the contact area between a drop and a solid by contracting/expanding/sliding the triple line, and we will compare the resulting works with the Young-Dupre work of adhesion.

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