Abstract Submitted
for the DFD17 Meeting of
The American Physical Society

Scattering of liquid droplets from axisymmetric targets[1] JACOB HALE, JACOB BOUDREAU, DePauw University — Droplets that glide along a bath of the same fluid are seen to scatter from a cylindrical meniscus analogous to Coulomb scattering of like-charged atomic particles. We define the impact parameter, b, as the distance between the tangent line to the initial trajectory of the droplet and the parallel radial line from the center of target. The scattering angle, θ, and the distance of closest approach, r_c are measured as functions of b. The asymptotic behavior of these values presents as expected for a rapidly decaying potential between the droplet and the target.

[1]This work was funded by the Science Research Fellows at DePauw University

Jacob Hale
DePauw University

Date submitted: 24 Jul 2017 Electronic form version 1.4