

Abstract Submitted
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Injecting a droplet into a quasi-2D jammed emulsion: Fluctuations and rearrangements ERIC R. WEEKS, XIA HONG, Physics Dept., Emory University — We experimentally study the dynamic response of a quasi-two-dimensional emulsion to a slowly growing injected droplet. Our area fractions range from $\phi = 0.77 - 0.99$, such that the droplets are in most cases in contact with one another and are in many cases highly deformed. There is no dependence of the average flow behavior on distance to the inflation droplet, or on polydispersity or packing fraction of the emulsions. However, the fluctuations of velocity increase as the packing fraction increases. The magnitude of the fluctuations appears similar in both monodisperse, moderately ordered samples and bidisperse, disordered samples.

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