Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Diffusion and microrheology of dense liposome suspensions[1] YAN YU, Dept of Materials Science & Engineering, University of Illinois at Urbana-Champaign, STEPHEN M. ANTHONY, Dept of Chemistry, University of Illinois at Urbana-Champaign, SUNG CHUL BAE, STEVE GRANICK, Dept of Materials Science & Engineering, University of Illinois at Urbana-Champaign — Phospholipid vesicles can be stabilized against fusion, up to volume fraction around 80%, which is accomplished by studding the outer leaflet with charged nm-sized particles. The diffusion of such soft, flexible and hollow objects is revealed by single-particle tracking. Image analysis of time trajectories, obtained using epifluorescence imaging, was performed at sub-pixel resolution. This poster will reveal aspects of curiously heterogeneous dynamics and also quantification of microrheology in this system. Taken together, this system of charged, polydisperse, flexible objects displays rich dynamics that contrasts acutely with known behavior for hard-sphere dense particle systems.

[1]We thank Dr. Jacinta Conrad and Dr. Angelo Cacciuto for helpful discussion and Mr. Yunus Kinkhabwala for help with single particle tracking.

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Date submitted: 21 Nov 2007 Electronic form version 1.4