

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Benchmarks for simulations of colloidal suspensions¹ TONY LADD, University of Florida — There are now a number of methods available to investigate the dynamics of colloidal suspensions; among the most popular are Stokesian dynamics, the lattice-Boltzmann equation, dissipative particle dynamics, and stochastic rotation dynamics. One of the most commonly asked questions is how do the various methods compare in terms of accuracy and computational cost. At present there is no meaningful answer, in part because it is not straightforward to construct clean test calculations and obtain reference solutions to these problems. I will outline some principles that may be helpful in developing a basis for comparison and describe preliminary results obtained with the lattice-Boltzmann method.

¹This work was supported by the National Science Foundation (CTS-0505929)

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Date submitted: 16 Nov 2007

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