Lattice-Boltzmann simulations of driven transport in colloidal systems

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Acknowledgments

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The work in this thesis covers the following publications:

Chapter 4:
F. Capuani, D. Frenkel and C.P. Lowe
Velocity fluctuations and dispersion in a simple porous medium

Chapter 5:
F. Capuani, I. Pagonabarraga and D. Frenkel
Discrete solution of the electrokinetic equations

Chapter 6:
F. Capuani, I. Pagonabarraga and D. Frenkel
Sedimentation velocity of highly charged spheres
(in preparation)

Chapter 7:
F. Capuani, I. Pagonabarraga and D. Frenkel
Sedimentation velocity of charged disks at various surface charge and volume fractions
(in preparation)

Chapter 8:
F. Capuani, D. Frenkel and I. Pagonabarraga
Electrophoretic mobility of charged-neutral model proteins
(in preparation)

Other publications:

M. Cosentino Lagomarsino, F. Capuani, and C.P. Lowe
A simulation study of the dynamics of a driven filament in an Aristotelian fluid