

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

The fluid-glass transition for hard spheres JOHN DROZD, COLIN DENNISTON, University of Western Ontario — A gravity-driven hard sphere simulation is used to study the phenomena of disorder-order transitions, or simply the glass transition from a granular hard sphere fluid to a jammed glass. We find a diverging length scale and a diverging viscosity at this transition and compare our simulation to experiment on the connection between local velocity fluctuations and shear rate.

John Drozd
University of Western Ontario

Date submitted: 20 Nov 2006

Electronic form version 1.4