

Abstract Submitted  
for the MAR08 Meeting of  
The American Physical Society

**Structural signatures of dynamical heterogeneity in supercooled liquids** HEIDI PERRY, DAVID REICHMAN, Columbia University, Department of Chemistry — The underlying mechanism of the transition from liquid to glass is a long-standing open question in condensed matter physics. One long sought after clue to understanding the glass transition is a link between the structure and dynamics of a vitrifying fluid. The dynamics of a supercooled liquid near the glass transition have proven to be collective and heterogeneous, with the length scale of the dynamic regions increasing as the glass transition temperature is approached. Using computer simulations and a normal mode analysis, we demonstrate a link between the structural properties of a super cooled liquids and the collective dynamical regions.

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Date submitted: 26 Nov 2007

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