Abstract Submitted for the MAR08 Meeting of The American Physical Society

**Point response of a 2D packing of soft colloidal spheres near the jamming transition.**<sup>1</sup> PETER J. YUNKER, DANIEL T. N. CHEN, ZEXIN ZHANG, ARJUN G. YODH, University of Pennsylvania — We have created a 2D jammed packing by confining a bidisperse mixture of thermoresponsive NIPA microgel spheres between two glass slides with a thickness of roughly the larger sphere diameter. The packing is subjected to a point compression created by local heating with optical tweezers. We use particle tracking microscopy to characterize the response as a function of particle volume fraction both above and below the jamming transition.

<sup>1</sup>This work was support by MRSEC grant DMR-0520020 and NSF grant DMR-0505048.

Peter J. Yunker University of Pennsylvania

Date submitted: 27 Nov 2007

Electronic form version 1.4