

Abstract Submitted  
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**Characterizing Three Dimensional Granular Materials<sup>1</sup>** DAVID CHEN, Duke University, JONATHAN BARES, University of Montpellier, HU ZHENG, CASEY BESTER, ROBERT BEHRINGER, Duke University — We use systems of hydrogel particles to determine the microscopic response of 3D granular systems to deformations near jamming. We visualize the particles using a laser scan technique, and we determine the motion of the particles along with their inter-particle forces and contacts from the reconstructed scans. We focus on their response to shear with low friction.

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