

Abstract Submitted  
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**Effective Temperatures in Sheared Glassy Systems**<sup>1</sup> ANDREA LIU, Dept. of Physics and Astronomy, University of Pennsylvania, AJAY GOPINATHAN, Dept. of Physics, University of California, Santa Barbara, TAL DANINO, University of California, San Diego — One of the outstanding challenges in condensed matter physics is to describe the collective properties of many-body systems far out of equilibrium. Jammed systems belong in this category; even when they are steadily sheared and can explore different packing configurations, they are still out of equilibrium. Statistical mechanics is a powerful tool for understanding many-body systems at or near thermal equilibrium. I will discuss recent evidence that fluctuations in steadily-sheared systems near jamming can be described by effective temperatures that can be many orders of magnitude higher than the ambient temperature.

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