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Dynamics of the Jamming Transition. MAHESH BANDI, Los Alamos National Laboratory, ANDRAS LIBAL, Johns Hopkins University, MICHAEL RIVERA, ROBERT ECKE, Los Alamos National Laboratory — We experimentally study the force fluctuations felt by a disk as it is dragged through a two-dimensional bi-disperse system of randomly packed disks. The fluctuations are studied as a function of packing fraction where the system goes from an unjammed to a jammed state with increasing packing fraction. As the system approaches the Jamming Point, the fluctuations are expected to diverge and become increasingly intermittent. The primary interest of this experimental work is to characterize the nature of the Jamming transition by analyzing the force fluctuations felt by the disk as it approaches the jammed state. We present the probability distribution functions and other statistical measures of jamming for many different packing fractions.

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