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**Active Microrheology in Active Matter Systems: Mobility, Intermittency and Avalanches** CHARLES REICHHARDT, CYNTHIA OLSON REICHHARDT, Los Alamos National Laboratory — We examine the mobility and velocity fluctuations of a driven particle moving through an active matter bath of self-mobile particles for varied system densities and activities. The driven particle mobility is strongly non-monotonic and is correlated with distinct spatial-temporal structures that arise in the active media. We identify an activity-induced crystallization regime that is distinct from the higher activity-induced phase-separated cluster regime. The probe particle velocity fluctuation distributions exhibit specific features in the different dynamic regimes. In the cluster phase, we observe telegraph noise, while in the denser active jamming regimes, the probe particle moves in intermittent jumps or avalanches of power-law distributed sizes.

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