

Supplemental Material: Effects of inertia on the steady-shear rheology of disordered solids

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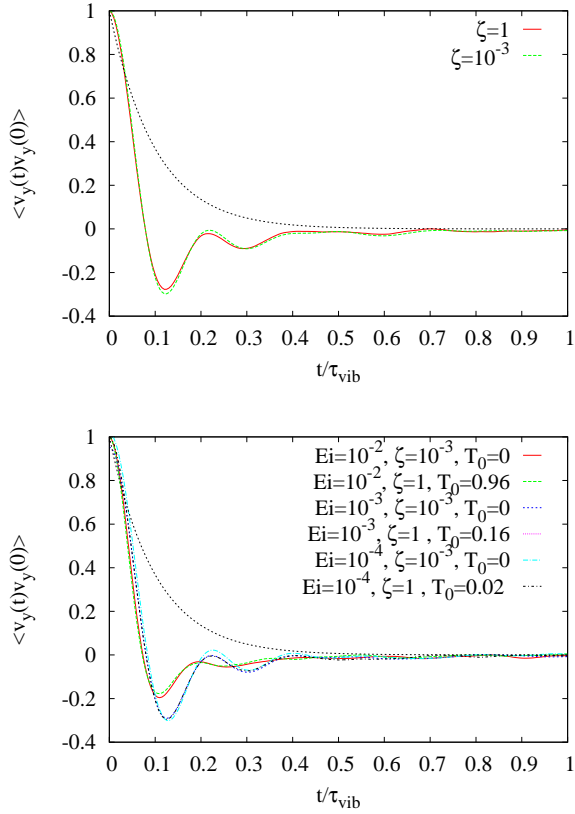


FIG. 1. Transverse velocity autocorrelation functions for particle mass $m = 1$ and different damping magnitudes ζ in (top) quiescent systems, *i.e.*, $Ei = 0$, at $T_0 = 0.16$ and (bottom) sheared systems, with Ei and T_0 as indicated in the legend. Note that the values of T_0 used for the flows at $\zeta = 1$ were chosen to match the kinetic temperatures of the strongly underdamped flows ($\zeta = 10^{-3}$) at the same rescaled shear rate Ei . The dashed black line is an envelope fit with the function $\exp(\frac{-t}{0.1\tau_{\text{vib}}})$

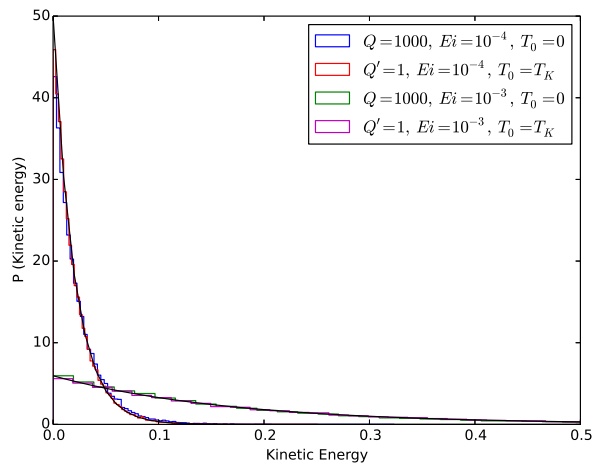


FIG. 2. Distribution of the kinetic energies $e_K = \frac{1}{2}mv_i^2$ of the individual particles in the athermal and thermostatted systems (as indicated in the legend). Solid black lines are fits to Boltzmann distributions $\propto e^{-e_K/T_K}$