ERRATUM

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Erratum

Glassy dynamics in monodisperse hard ellipsoids

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After the online publication, we realized some errors in the figures, none of which affect the line of arguments or conclusions of our publication. Corrected versions of figs. 1–3 are published here below. In fig. 1, the curves of the right-hand panels were swapped. In fig. 2, lower left panel, the curves corresponding to the two highest volume fractions were missing. In fig. 3, the data in panels b) and d) is valid, and should be shown, only up to $10^5$ MD steps, as crystallization begins in this system thereafter. And regarding fig. 4, we would like to add that the diffusion constants of the prolate ($l/w = 1.25$) system have been divided by 1.3 to match the structural length scale of the oblate ($l/w = 0.80$) system as given by the maximum of the static structure factor.

Fig. 1: Self-intermediate scattering functions at several volume fractions $\phi$ (prolate: 0.474, 0.511, 0.533, 0.551, 0.565, 0.578, 0.588, 0.598; oblate: 0.473, 0.504, 0.533, 0.550, 0.565, 0.578, 0.598, 0.598, 0.606, 0.614). At high volume fractions there is a plateau on intermediate time scales. The final relaxation is slowed down strongly with increasing volume fraction, indicative of glassy dynamics.

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Fig. 2: (Color online) Second-order orientational correlators at several volume fractions $\phi$ as in fig. 1. Again a plateau develops with increasing $\phi$. Hence, orientational degrees of freedom are coupled to the positional ones. Also shown are the third-order correlators at the highest density (bold green lines). They do not slow down, indicating that flipping modes are not affected.

Fig. 3: Self-intermediate scattering functions $F_s(q,t)$ of a) the oblate system (MC data) and b) the prolate system (MD data) at the highest volume fraction, for the range $2.8 \leq qw \leq 20$. The dashed lines show fits to the von Schweidler law $F_s(q,t) = f_0 - b_1^{(1)}q^b + b_2^{(2)}q^{2b}$ with $b = 0.65$. c) and d) show the same data transformed to $R(t) = [F_s(q,t) - F_s(q,t_1)]/[F_s(q,t_2) - F_s(q,t_1)]$. The collapse of the functions onto master curves demonstrates the factorization property.