Electronic supplemental material to the article: Mean Squared Displacement from Fluorescence Correlation Spectroscopy

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(Dated: January 29, 2016)



FIG. 1. MSD(t) for the Rouse model (Rouse), Kremer-Grest model in the Langevin thermostat (KG-Lan) and Kremer-Grest model with Lattice-Boltzmann hydrodynamics (KG-LB). For comparison, we show the MSD(t) of the centre of mass of the chain $(g_3(t))$ and of a single monomer $(g_1(t))$ averaged over all monomers of the chain.



FIG. 2. Analogue of Fig. 1, showing the scaled mean squared displacement $MSD(t)/6D_N t$.



FIG. 3. The FCS correlation functions, G(t, w) for all three considered models. For comparison, G(t, w) of a single particle performing normal diffusion with diffusion coefficient D_N^{R} are shown as dashed lines.



FIG. 4. The scaled apparent mean squared displacement, $MSD^{app}(t, w)$, obtained from G(t, w) for all three considered models. For comparison, the true mean squared displacement, MSD(t) is shown as well.



FIG. 5. The ratio of the apparent mean squared displacement, and the true one for various values of w, for all three considered models.



FIG. 6. The ratio of the apparent mean squared displacement, and the true one for various values of w, for all three considered models.

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