Publisher's Note: Inequivalence of time and ensemble averages in ergodic systems: Exponential versus power-law relaxation in confinement [Phys. Rev. E 85, 021147 (2012)]

Jae-Hyung Jeon and Ralf Metzler

(Received 9 March 2012; published 14 March 2012)

DOI: 10.1103/PhysRevE.85.039904 PACS number(s): 05.70.Ln, 02.50.−r, 05.40.−a, 87.15.Vv, 99.10.Fg

This paper was published online on 27 February 2012 with incorrect versions of Figs. 2, 3, and 4. The figures have been replaced online as of 9 March 2012. The figures are incorrect in the printed version of the journal; therefore, for the benefit of the print readership the figures and their captions are duplicated below.

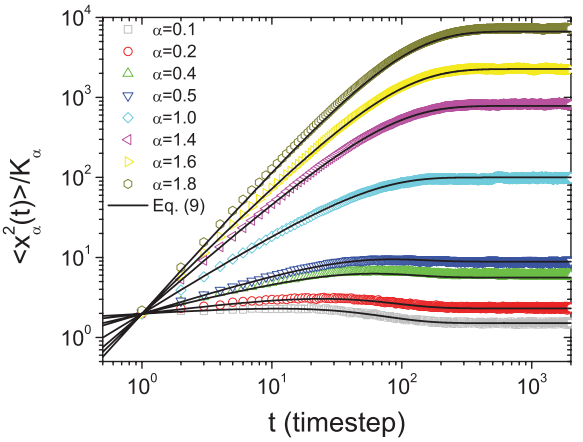

FIG. 2. (Color online) EA MSD $\langle x_\alpha^2(t)\rangle$ for FBM in an harmonic potential. Solid lines: Eq. (9). Symbols: simulations with parameters $k = 0.01$, $T = 2048$, and $x_0 = 0$.

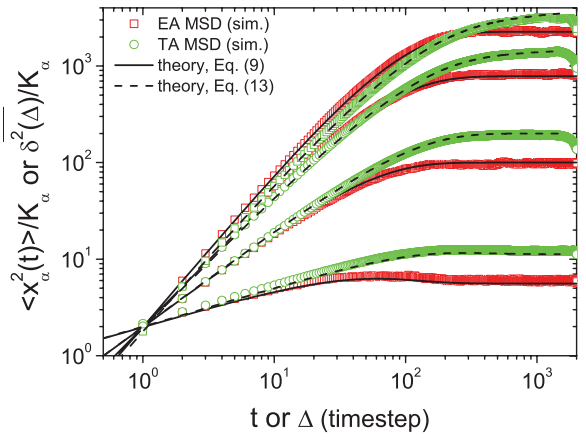

FIG. 3. (Color online) EA and TA MSD, $\langle x_\alpha^2(t)\rangle/K_\alpha$ and $\overline{\delta^2(\Delta)}/K_\alpha$, for FBM in an harmonic potential ($\alpha = 0.40$, 1.0, 1.4, and 1.60, from bottom to top). Solid and dashed lines: analytical results, (9) and (13), respectively. Symbols: simulations. Parameters as in Fig. 2.

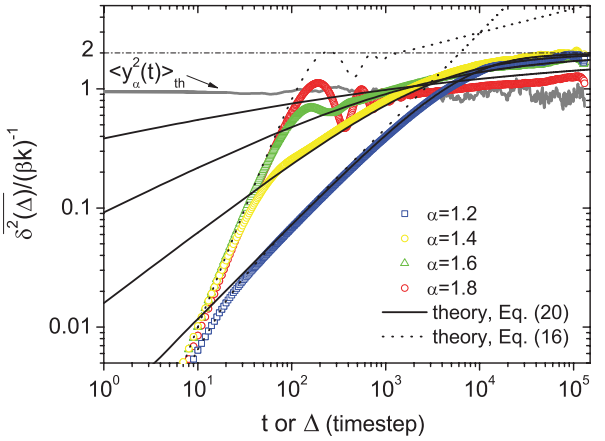

FIG. 4. (Color online) TA MSD for FLE motion in an harmonic potential, for $\alpha = 1.2$, 1.4, 1.6, and 1.8 (from bottom to top) and $T = 2^{17}$. A representative EA MSD is included for $\alpha = 1.2$. Symbols: Simulations with time step $\delta t = 0.001$, stiffness $k = 100$, mass $m = 1$, friction coefficient $\gamma = 100$, and $\beta = 1$, with an equilibrium distribution of initial position $y_\alpha(0)$ and velocity $\dot{y}_\alpha(0)$. Solid lines: theoretical result, (20). Dotted lines: unbiased motion, Eq. (16), with momentum relaxation at $\alpha = 1.4$ and 1.8, illustrating ballistic scaling $\sim\Delta^2$ at $\Delta < \tau_c$.

