Erratum: Time fluctuations in isolated quantum systems of interacting particles [Phys. Rev. E 88, 032913 (2013)]

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We report a mistake in the computation of the initial state $|PP\rangle$ for L=12,14,20. This produced the spurious oscillations within the decay of fluctuations as a function of L, shown in Fig. 6 of our paper. The correct plot is shown here in Fig. 1.

The correct coefficients κ for the state $|PP\rangle$ in the Table V of our paper are 0.239 for \widehat{KE} , 0.206 for $\widehat{C}^z_{L/2,L/2+1}$, and 0.240 for $\widehat{s}^z_f(\pi)$. The error does not alter any of our observations and conclusions. On the contrary, since the oscillations have been removed, the values of R^2 for the exponential fittings have consistently improved. Therefore, the correct results for $|PP\rangle$ presented here reinforce the generality of the exponential decay of the fluctuations with L reported in our paper.

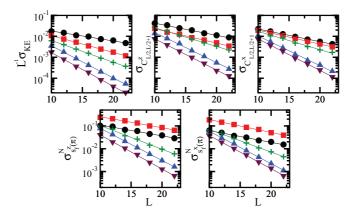


FIG. 1. (Color online) Logarithmic plots of the standard deviation of the time fluctuations for different observables vs L for $|DW\rangle$ (circles), $|NS\rangle$ (squares), $|PP\rangle$ (plus), $|\xi_{S^z=0}\rangle$ (up triangle), and $|\xi_{2^L}\rangle$ (down triangle). The solid lines correspond to logarithmic fits and $\sigma_O^N = \sigma_O/\overline{O}$. All panels: $H_{\Delta=1,\lambda=0}$ and averages performed in the time interval [100,500], except for the domain wall state which used $[5\times10^2,5\times10^3]$.