Erratum: Dynamical mean-field theory of correlated hopping: A rigorous local approach [Phys. Rev. B 67, 075101 (2003)]

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The plots presented in our original manuscript were calculated with an error in the code. We find a typo in one of the coefficients in the decomposition of Eq. (5.11) into simple fractions over $t_{\mathbf{k}}$.

The corrected figures are shown in Figs. 1–3. One can see that the differences from the previous plots are mainly quantitative: (i) the upper band is now wider and the gap exists at smaller absolute values of correlated hopping $|t_2|$ (see Fig. 1) and (ii) the temperature driven Mott transition now takes place at larger values of interaction U (see Fig. 3).

Besides, based on the incorrect numerical results the wrong conclusion was made that in the case of the diagonal hopping matrix ($t_2/t_1=-1$) and for the Gaussian density of states each subband contains contributions from both subspaces. Now one can see from Fig. 1 [case (d) $t_2/t_1=-1$] that for the Gaussian density of states we have independent bands too, as was obtained analytically for the semielliptic density of states.

We thank O. Farenyuk for bringing the error in numerical results to our attention.

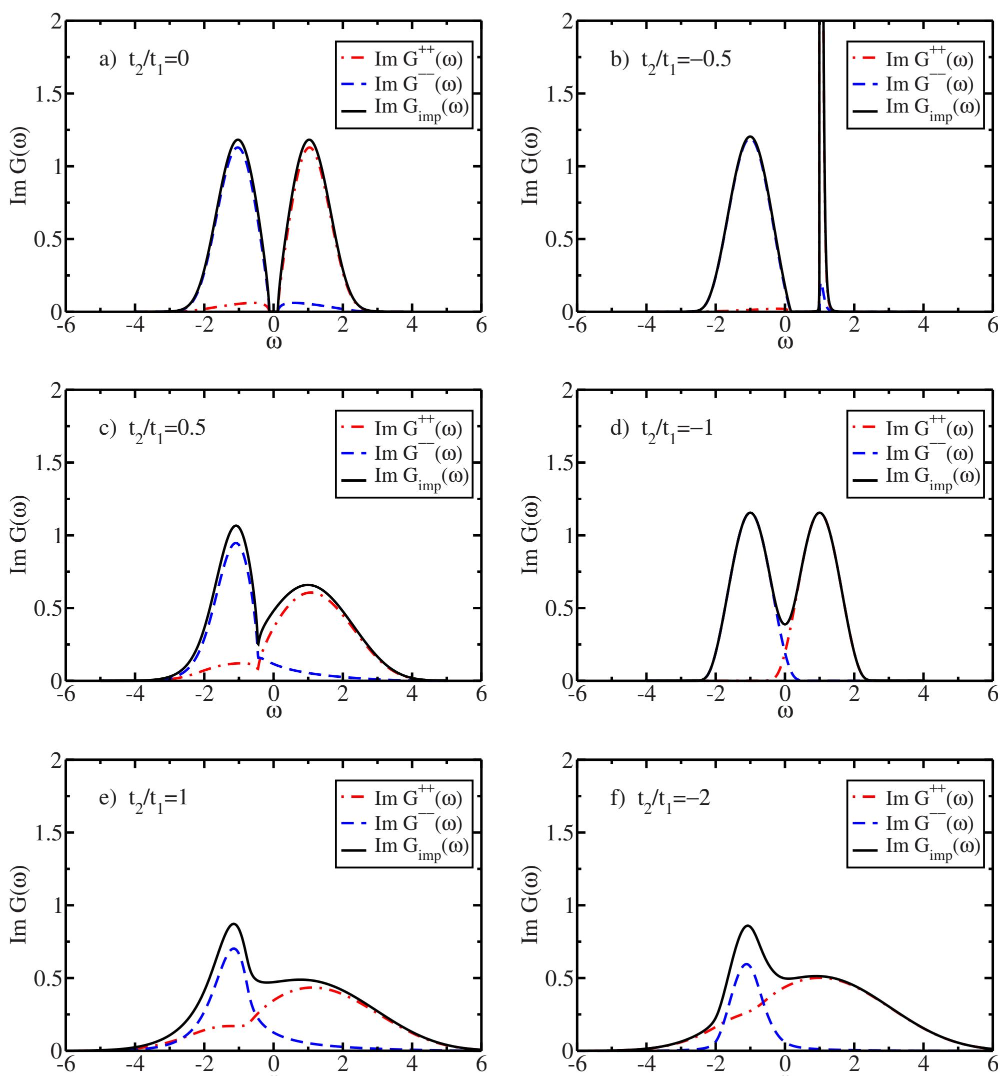

FIG. 1. (Color online) The spectral function (imaginary part of the Green's function) and its components for different relations t_2/t_1 ($t_3=0$) for the $D=\infty$ hypercubic lattice with nearest-neighbor hopping ($W=1$, $U=2$, $T=0.01$) at half-filling $\mu_d=\mu_f$, $n_f+n_d=1$.

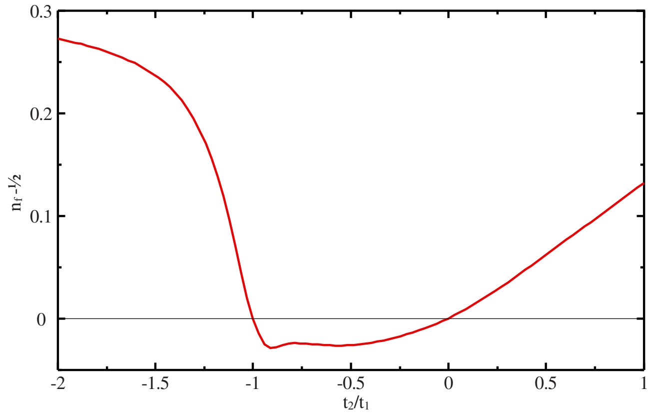

FIG. 2. (Color online) Deviation from the half-filling of the f-state occupation as a function of t_2/t_1. Parameter values are the same as in Fig. 1.

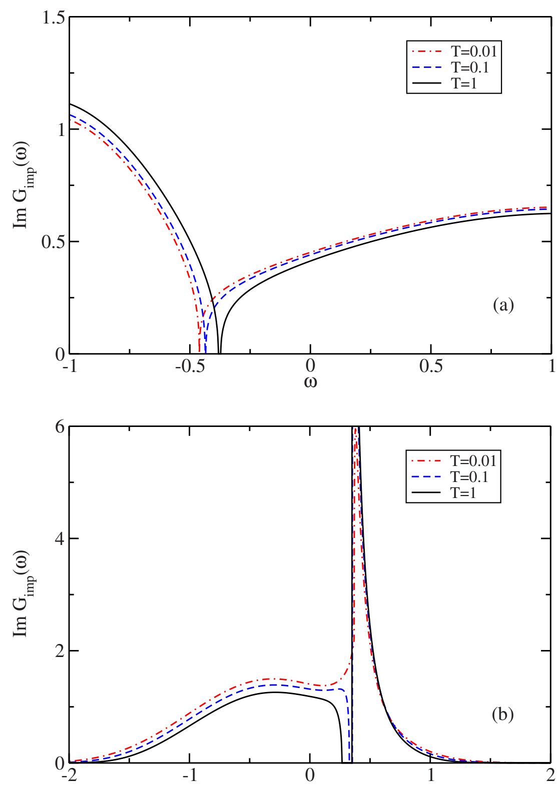

FIG. 3. (Color online) Temperature development of the gap (Mott transition) for (a) t_2/t_1=0.5, U=2.1 and (b) t_2/t_1=−0.5, U=0.7.