

Matsubara and Iguchi Reply: We do not agree with this Comment [1], because many serious points appear in this paper.

They assert that data of a Ruderman-Kittel-Kasuya-Yoshida (RKKY) model with spin concentration c_1 at a temperature T_1 correspond to those of the same model with different spin concentration c_2 at the temperature $T_2 = c_2 T_1 / c_1$ [2], and combined their data ($c = 0.005$) of Ref. [3] and our data ($c = 0.05$) of Ref. [4]. We believe this is not correct. We have also studied the same model with spin concentration of $c = 0.01$. Both data are plotted in Fig. 1, where for $c = 0.01$ the temperature is 5 times as large as that actually used in the simulation. In fact, the data for these two spin concentrations show different temperature dependences. Any scaling analysis should be made separately for different spin concentrations. Note that, for $c = 0.01$, we have also made a scaling analysis and found a finite transition temperature of $T_c \sim 0.008$.

They extract values of $q_{\text{corr}}^{(2)}(T)$ from our data of Ref. [4]. However, they do not give *any definite description* of the method. They should describe how to estimate $q^{(2)}(0)$ for every size of the lattice and how to estimate its temperature dependence. If not, no one can examine whether their estimation is valid or not. We also note that in Fig. 1 of Ref. [1] they plot *corrected values* of our data but only *a part of them*. For example, in the case of $L = 12$ ($N = 346$), only four points appear in the figure, whereas we gave eight points [4].

We examine this Comment [1]. They assert that the failure of the scaling form (3) of Ref. [1] seen in Fig. 4(a) of Ref. 4 is due to the neglect of a correction. If this were true, and $q_{\text{corr}}^{(2)}$ were scaled by using the function of Eq. (4) of Ref. [1], $q^{(2)}$ would deviate upwards from some scaling curve. The deviation would be larger for smaller L 's because the correction comes from a finite size effect, and the data of smaller L 's in Fig. 4(a) would always appear upwards of those of larger L 's. This is true only for smaller L 's ($L \leq 12$ or $N \leq 346$). For larger L 's, however, the tendency becomes opposite. One can see clearly the data for $L = 20$ upwards of those for $L = 16$. We believe that the failure of the scaling form *at least for larger L 's* is due to the assumption of $T_c = 0$.

We should emphasize the following point. If one analyzes data of smaller lattices only, one may see that both of the scaling fits with $T_c = 0$ and with $T_c \neq 0$ hold equally

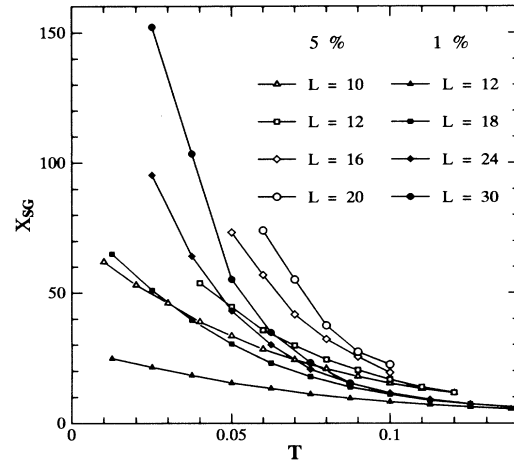


FIG. 1. Temperature dependences of the spin-glass susceptibility χ_{SG} of the RKKY models with $c = 0.01$ and 0.05 .

well, as seen in Fig. 4(b) of Ref. [4] for $L \leq 12$. Data of larger lattices are needed to examine which scaling fit is correct. We have added those data and obtained the conclusion [4].

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