
Despite our assertion to the contrary, the integral of the last two terms in (22) is not zero except at \( T = 0 \). As a result (23) is correct only in this neighborhood and Fig. 1 is wrong.

By transforming (22) into a sum over the poles of the Fermi function, one obtains

\[ J_s = \frac{\pi}{n} \sum_{l=0, \pm 1, \cdots} \frac{1}{\omega_l^2 + \Delta_1^2(T)} \frac{1}{\omega_l^2 + \Delta_2^2(T)} \]

where \( \omega_l = \pi(2l + 1)/\beta \). In the limit \( T \to 0 \) the sum approaches an integral and (23) is recovered.

For a symmetrical junction the sum may be done analytically leading to

\[ J_s = \frac{\pi}{2} \frac{1}{n} \Delta(T) \tanh \frac{1}{2} \beta \Delta(T). \]

This formula differs qualitatively from (23) in that \( J_s \) vanishes like \( A^2 \) near \( T = T_c \) and not like \( \Delta \). The tangent at \( T = T_c \) is \( J_s(T)/J_s(0) = 2.67 \times [1 - (T/T_c)] \). For \( \Delta_1 \neq \Delta_2 \) the curve approaches \( T = T_c \) with an infinite slope. However, in this case it seems necessary to resort to numerical calculation for \( T \neq 0 \). The results of such a calculation for \( \Delta_1(0)/\Delta_2(0) = 0.5 \) are shown in the accompanying figure which should replace Fig. 1 of the original paper.

We are grateful to Professor P. G. de Gennes for pointing out this error. One of us (V.A.) would like to thank the Westinghouse Research Laboratories for hospitality and some computational assistance.


In our Letters it is stated that the contribution to biquadratic exchange from exchange-induced distortion is very small. While this is correct for the usual isotropic model, more detailed considerations of the observed anisotropic nature of the distortions show that this contribution is greatly accentuated. We estimate that this mechanism may account for about one tenth of the biquadratic term in NiO, about half in MnO, and perhaps more than half for an isolated Mn pair.