

Scalettar, Singh, and Zhang Reply: In the preceding Comment [1] to our recent Letter [2], Dagotto, Kampf, and Schrieffer (DKS) raised two essential points to which we shall reply in the following.

First, they pointed out that a conventional type of pairing, i.e., between states $(k, -k)$ could also lead to large fluctuations of the odd-parity-singlet-pairing (OPSP) operator, where its static value vanishes. This effect is due to the antiferromagnetic fluctuations present close to half filling, which leads to a "dynamic mixing" of the states k and $k+Q$. We agree with DKS that this interpretation could also be consistent with the Monte Carlo results presented in our paper. Because of the strong antiferromagnetic fluctuations, a conventional pairing state might exhibit large pairing fluctuations around momentum Q and, conversely, a pairing state with momentum Q might also show large fluctuations of the conventional type. Which one of the above possibilities is realized in the Hubbard model is still an open question.

Second, DKS point out that the quasiparticle residue at the shadow Fermi surface with momentum $-k+Q$ is smaller than a state from the original Fermi surface. We again agree with this observation. This fact is directly visible from the Monte Carlo data presented in our paper. They show that \bar{P} , which is a measure of the quasiparticle residue, is in fact, lower than that of a conventional pairing state. However, it is the combination of \bar{P} and the irreducible interaction vertex Γ that determines T_c . We actually find that Γ is strongly enhanced by the interaction in the OPSP state, so that the product of Γ and \bar{P} is larger in the OPSP channel than in the conventional channel. We therefore believe that a smaller quasiparticle weight does not always imply a lower T_c .

Finally, we would like to make a clarifying remark concerning the normalization of the pairing susceptibilities P and \bar{P} in the p -wave channel. The convention in our paper is that originally introduced in the literature [3].

This is a factor of 2 lower than that introduced in Ref. [4], where the normalization of different channels is considered in a more consistent fashion, which requires that the sum of the square of the momentum-dependent form factor over the Brillouin zone be equal to 1. Changing the normalization of P and \bar{P} reduces the interaction vertex Γ by a factor of 2. This reemphasizes the statement in Ref. [2] that the most relevant quantity to consider is the product $\Gamma\bar{P}$, which is invariant under the choice of normalization. This quantity is larger for the OPSP state than d wave for the parameters and lattices considered in Ref. [2].

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