Supplemental Material for the article
"Competing d-wave and p-wave Spin-Singlet Superconductivities in the Two-Dimensional Kondo Lattice"

Junya Otsuki

Department of Physics, Tohoku University, Sendai 980-8578, Japan

In the main text, numerical results for pairing fluctuations are shown for the system size $N = 32^2$. Here we discuss those size dependence. Figure S1 shows temperature dependence of λ_{SC} for B_{1g} and E_u symmetries. Figure S1(a) is the data for $N = 32^2$ which is presented in Fig. 3(a) in the main text. The corresponding data for $N = 64^2$ are shown in Fig. S1(b). It turns out that the data exhibit a behavior similar to the case with $N = 32^2$. Comparison between $N = 32^2$ and 64^2 is presented in Fig. S1(c). The transition temperature is slightly larger in $N = 64^2$. In conclusion, the discussions in the main text do not change qualitatively even for larger system size.
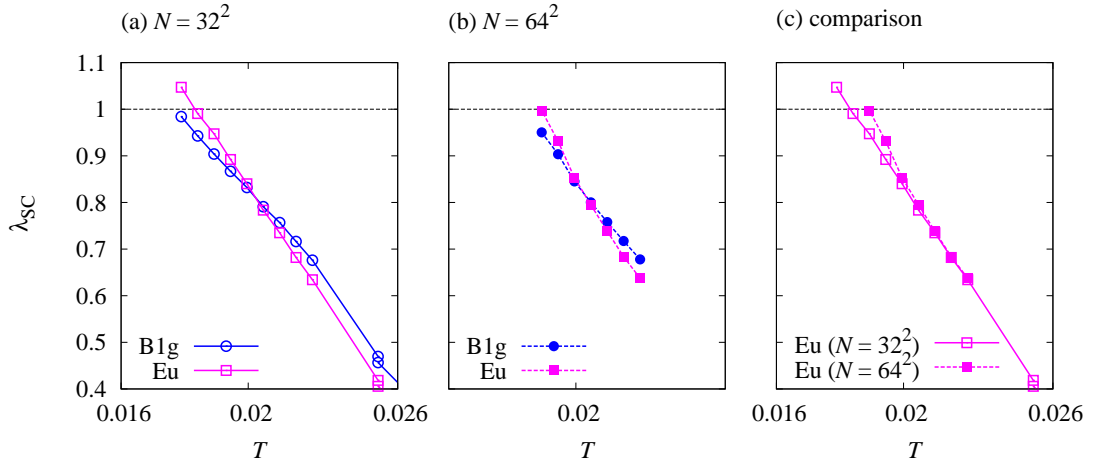

FIG. S1: The leading eigenvalue λ_{sc} for B_{1g} and E_u symmetry for $J = 1.0$. (a) $N = 32^2$, (b) $N = 64^2$, (c) comparison between different system sizes.