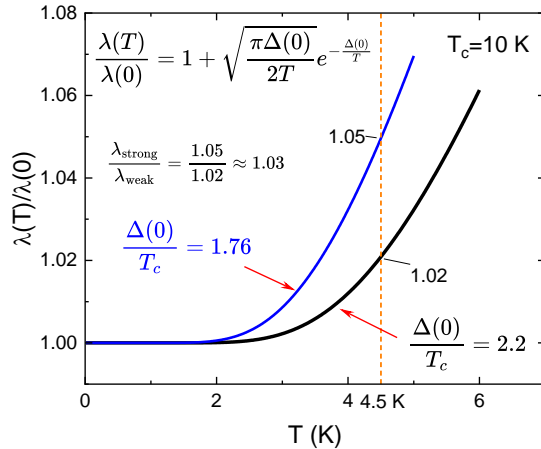


Dear Dr. Tsirlin,

Thank you very much for a prompt study of our response. I apologize if one of the answers was incomplete. Here, I provide a detailed analysis.

GOAL: Estimate the correction to the superfluid density if we have strong coupling, which affects the London penetration depth measured at 4.5 K and then extrapolated to zero.

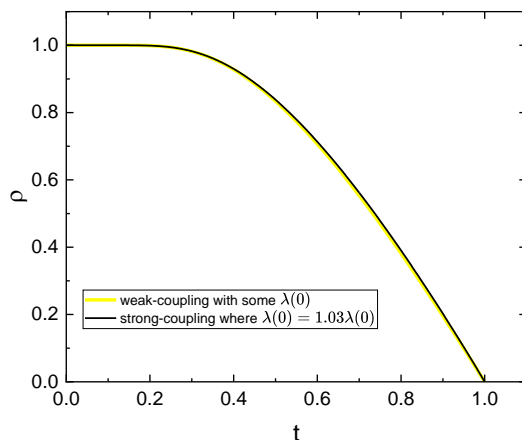
In isotropic case, for arbitrary coupling strength:



The x-axis is in actual degrees and the y-axis is calculated with the asymptotic formula shown. The blue curve is the weak-coupling limit, and the black curve is calculated for the enhanced gap to T_c ratio. From this, we estimate that at $T=4.5$ K, the ratio of London penetration depths is 1.03, where the strong coupling value is slightly larger.

Now, we measured $\Delta\lambda$ without any assumptions in absolute units. Therefore, total London penetration depth is, $\lambda(T) = \lambda(0) + \Delta\lambda(T)$ and the superfluid density is, $\rho(T) = \left(\frac{\lambda(0)}{\lambda(T)}\right)^2 = \left(1 + \frac{\Delta\lambda(T)}{\lambda(0)}\right)^{-2}$.

Here we have to use two different $\lambda(0)$ extracted above. The results show that the difference is negligible. Here the weak-coupling case is shown by a slightly thicker yellow line so that the black strong-coupling case can be seen.



CONCLUSION: The conclusion is that while the value of $\lambda(0)$ is, indeed, important, it has to be significantly different to cause visible change.