Erratum: Loss of Superconducting Phase Coherence in YBa$_2$Cu$_3$O$_7$ Films: Vortex-Loop Unbinding and Kosterlitz-Thouless Phenomena

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Jürgen Kötzler, Detlef Görlitz, Sven Skwirblies, and Axel Wriedt
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Because of a missing factor of $2/\pi$ in the Kramers-Kronig (KK) integration routine taken from the NAG FORTRAN library, MARK 19 (subroutine D01AQF), the calculated curves in the lower panel of Fig. 2 were too high. The correct KK transforms of our phenomenological law for $\omega G''$, Eq. (2), are depicted in Fig. 1 below.

It should be noted that our conclusions were drawn from the relaxation times $\tau(T)$ obtained from the fits of $\omega G''$ to Eq. (2), which reproduce the peak temperatures of $\omega G'$. None of our conclusions were based on the shape of $\omega G'$.

We thank Petter Minnhagen (Umeå) for pointing out the error.

FIG. 1. Temperature dependence of the loss and screening components of the conductance above $T_c$ of the 100 nm thin film. The full curves are fits to the phenomenological law for $\omega G''$, Eq. (2), with $\alpha = 0.7$, and to its Kronig-Kramers transform $\omega G'$. 

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