Supplementary Material

Fermi liquid-like behaviour of cuprates in the pseudogap phase simulated via *T*-dependent electron-boson spectral density

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Temperature-dependent changes of the parameters in the EBSD function

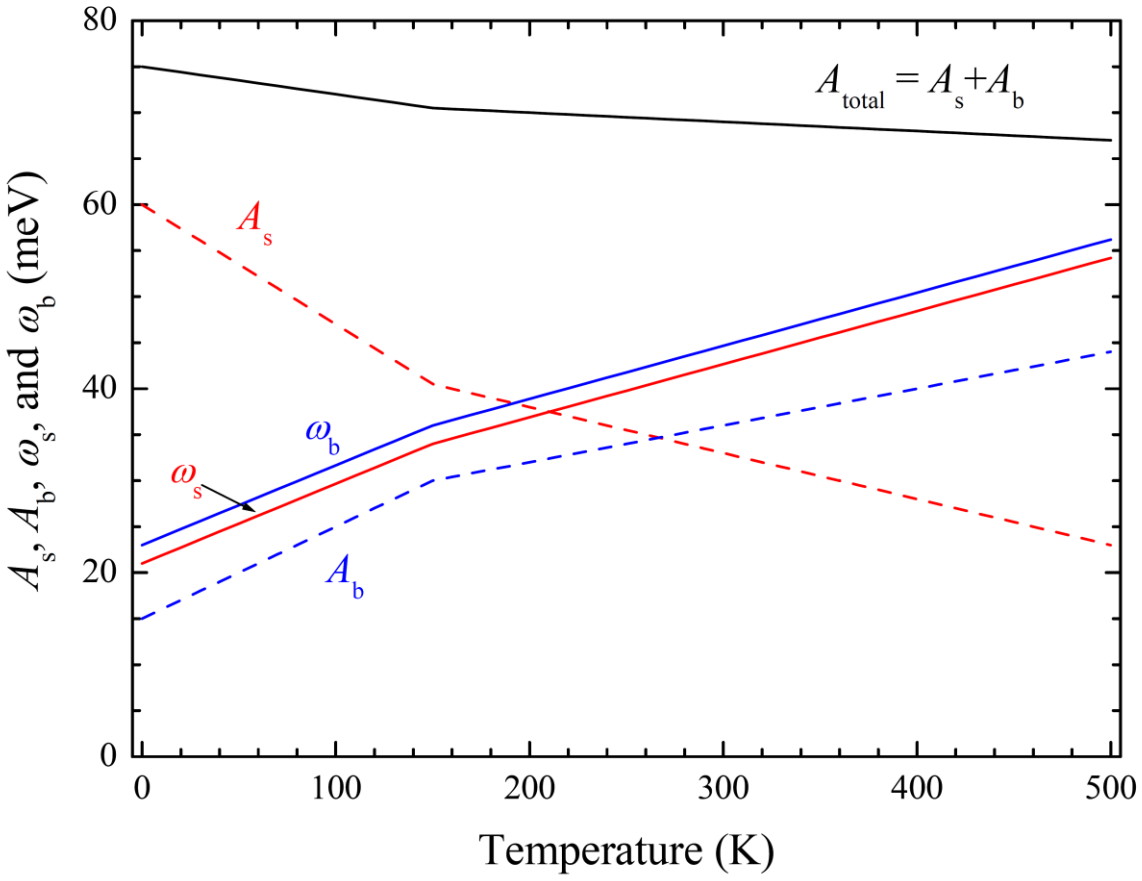

Figure S1: Temperature-dependent changes of the parameters in the *T*-dependent EBSD function (see Eq. (4) in the main text).

Results from temperature-independent electron-boson spectral density (EBSD) function

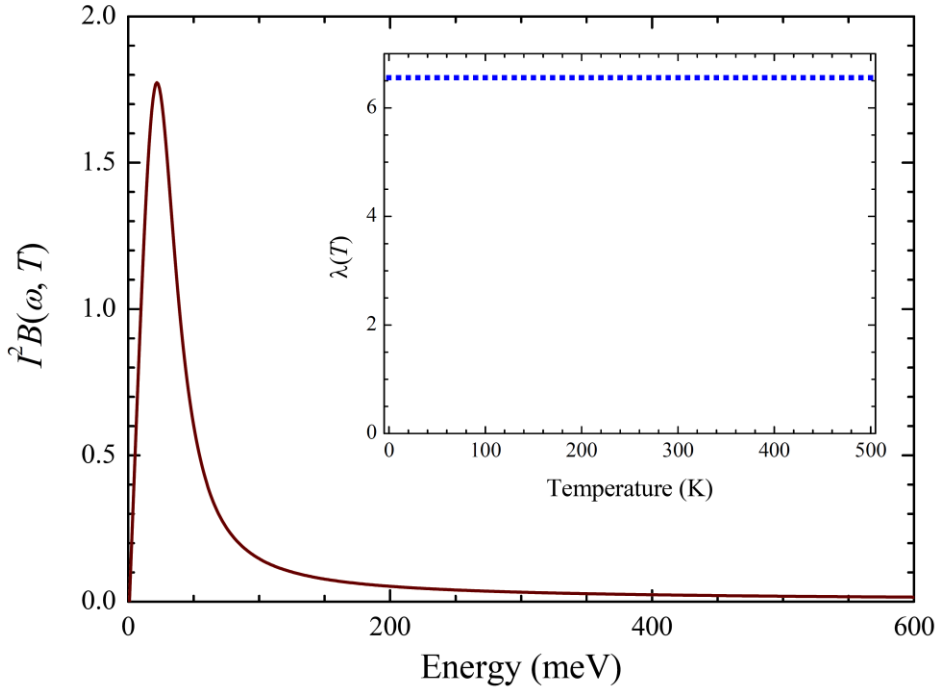

Figure S2: Electron-boson spectral density (EBSD) function, which consists of two (sharp and broad) components. In the inset, the temperature-independent coupling constant ($\lambda(T)$) is shown. The EBSD is temperature independent and consists of two components as described in Eq. (4) in the main text. The parameters are as follows: A_b = 30 meV, ω_b = 23 meV, ω_c = 625 meV, $A_s/\sqrt[4]{3}$ = 21 meV, and ω_s = 60 meV.

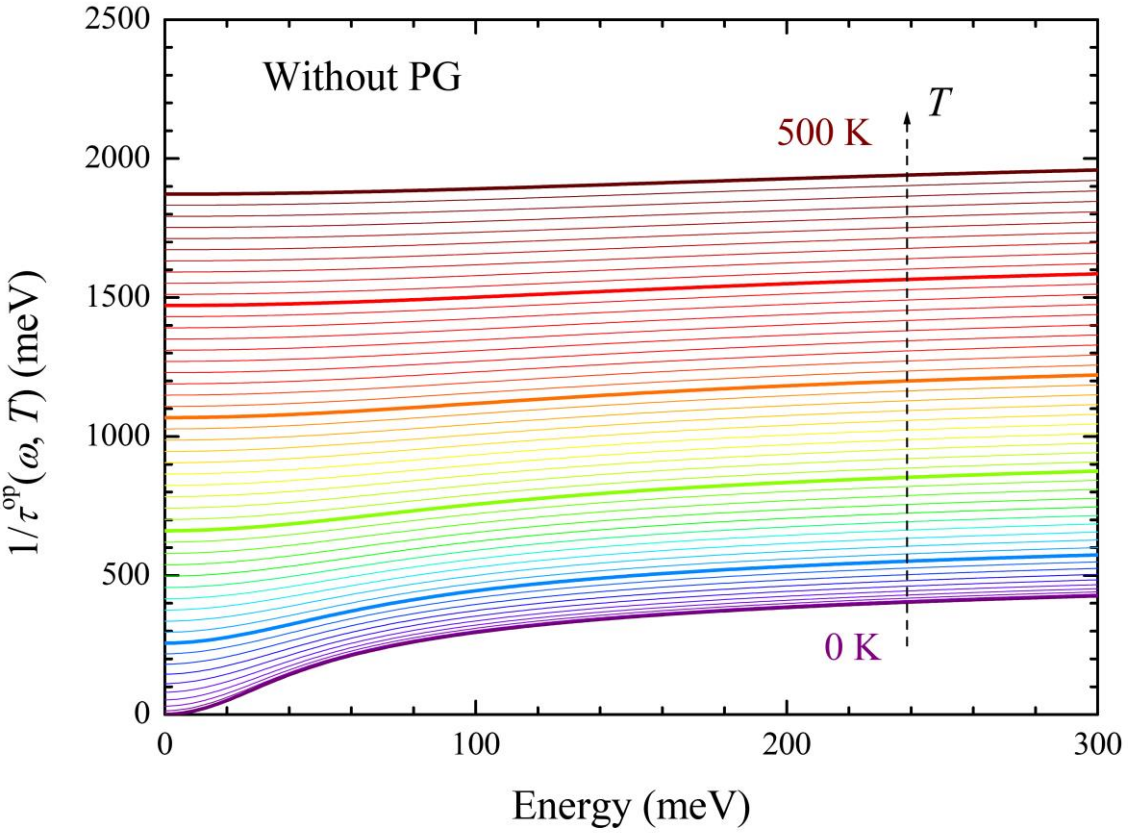

Figure S3: Optical scattering rates at various temperatures ranging from 0 to 500 K with a 10 K increment without including the pseudogap. We note that the thick purple is 0 K, the thick blue curve is 100 K, the thick green curve is 200 K, the thick orange curve is 300 K, the thick red curve is 400 K, and the thick dark brown curve is 500 K.

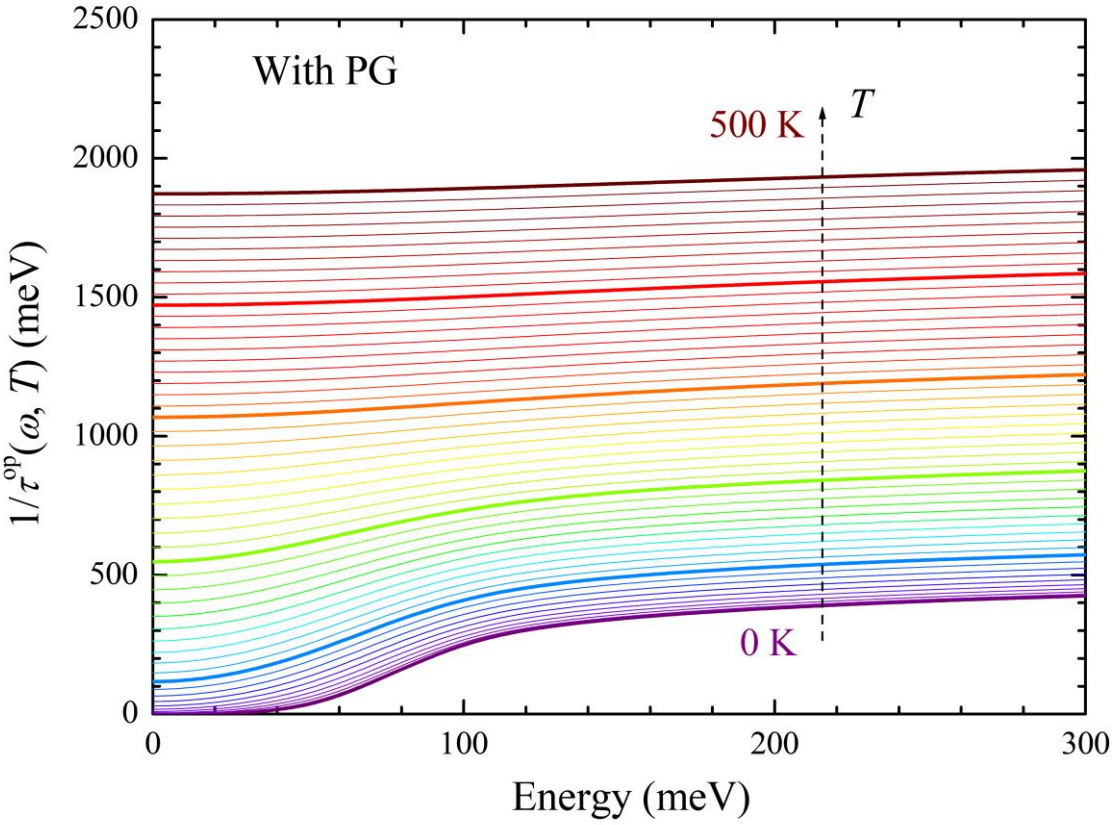

Figure S4: Optical scattering rates at various temperatures ranging from 0 to 500 K with a 10 K increment including the pseudogap. Note that the thick purple is 0 K, the thick blue curve is 100 K, the thick green curve is 200 K, the thick orange curve is 300 K, the thick red curve is 400 K, and the thick dark brown curve is 500 K. The same temperature-dependent pseudogap model in the main text (see the inset of Fig. 3) is used for the pseudogap.

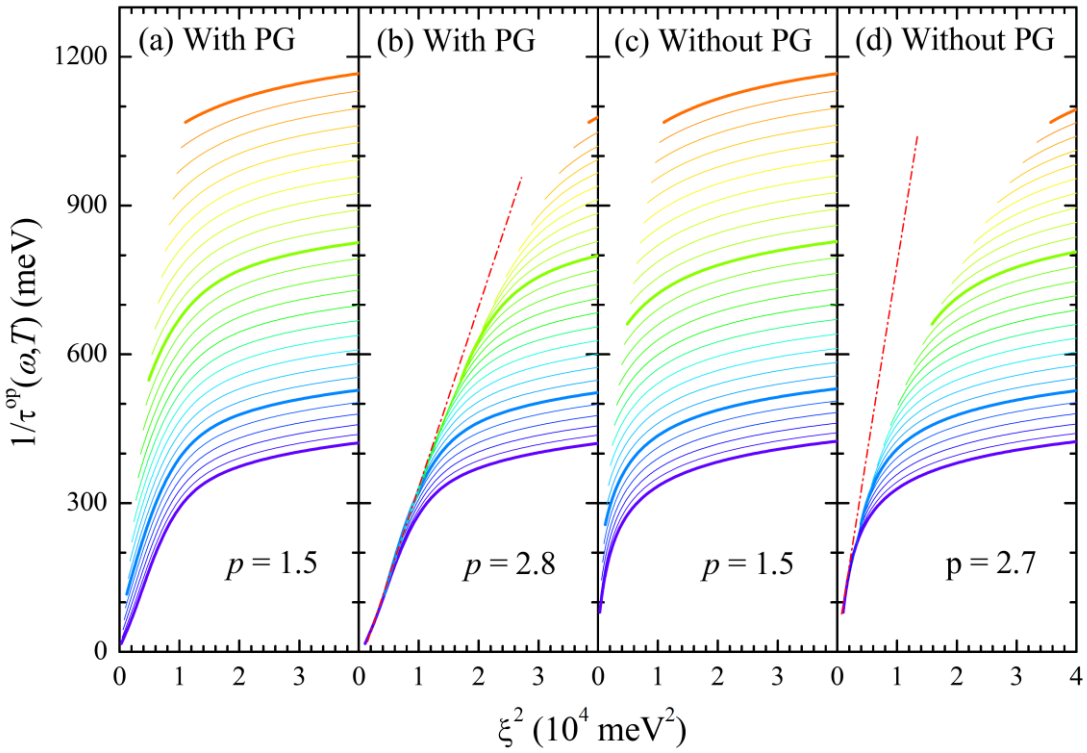

Figure S5: Optical scattering rates as functions of $\xi^2 \equiv (\hbar\omega)^2 + (p\pi k_B T)^2$ for (a) p = 1.5 and (b) p = 2.8 including the PG and (c) p = 1.5 and (b) p = 2.7 without including the PG. Here, the optical scattering rates at temperatures between 50 and 300 K are displayed, including only the pesudogaps with reasonable pesudogap depths. Note that the thick blue curve is 100 K, the thick green curve is 200 K, and the thick orange curve is 300 K. The dash-dotted lines in (b) and (d) are guides for the eyes.