Low Frequency Conductivity Scaling in CaRuO$_3$

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— We present low frequency conductivity measurements of CaRuO$_3$ thin films using time domain terahertz spectroscopy. The complex conductivity is measured in the frequency range of 200 GHz to 1.4 THz and temperature range of 10 K to 290 K. Below 50 K a Drude-like peak develops which is sufficiently narrow that it is only observable in our frequency window. We also observe a universal scaling of conductivity in the form of $\sigma_1 \omega^{1/2} \propto g(\omega/T)$ for $1 < \hbar \omega/k_B T < 5$, in agreement with infrared observations of Lee et al.$^1$ However, our low frequency range allows us to identify deviations from such scaling for $\hbar \omega/k_B T < 1$.