

Abstract Submitted
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Optical Conductivity of Weakly Ferromagnetic Metals¹ DERMOT COFFEY, Dept. of Physics, Buffalo State College, NY 14222 — The frequency and temperature dependences of the contributions to $\sigma(\omega)$ from impurity and phonon scattering are calculated using an extension to the paramagnon model due to Hirsch¹. This model includes both an on-site repulsion and a nearest neighbor ferromagnetic coupling. The Debye model is used for the phonons. The dependences of these contributions on the parameters of the model are presented.

¹ J. E. Hirsch, Phys. Rev. B **40**, 2354 and 9061 (1989).

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