

Abstract Submitted
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Dynamic Magnetic Response of Heavy Fermion Semimetals PETER RISEBOROUGH, Temple University — We have calculated the dynamical magnetic response of a model of a heavy fermion semimetal, which is characterized by a narrow gap in the f density of states and a low conduction electron density of states at the Fermi energy. The model is used to fit optical absorption measurements on $CeRu_4Sb_{12}$ performed by Dordevic *et al.*, Phys. Rev. Lett. **86**, 684 (2001). The temperature dependence of the dissipative part of the magnetic response is compared with the experimentally determined inelastic neutron scattering cross-section of $CeRu_4Sb_{12}$ measured by Adroja *et al.* Phys. Rev. B **68**, 099426 (2003).

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