

Transport in Thin Disordered Magnetic Films

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I will first review a series of transport measurements on disordered thin ferromagnetic films (Fe, Gd) which show the importance of scattering of electrons off (ferromagnetic) spin-waves. I will then talk about some recent experiments on Mn, where the unique temperature dependence of conductivity from scattering off (gapped, anti-ferromagnetic) spin-waves can be used to obtain the gap as well as the exchange energy directly from transport measurements. In addition, a novel non-universal weak localization correction to the conductivity is shown to exist and extend to very large disorder.