

Abstract Submitted  
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**Pseudogaps from thermally disordered spin density waves: optical and Hall conductivity**<sup>1</sup> JIE LIN, Materials Science Division, Argonne National Laboratory, ANDREW MILLIS, Department of Physics, Columbia University — We use the spin-fermion model and an approximation originally introduced in the charge density wave context by Lee, Rice, and Anderson to study the conductivity and the Hall conductivity of two-dimensional systems close to antiferromagnetically ordered states. The electron spectral function reveals a pseudogap. Calculation of the longitudinal and Hall conductivities requires a vertex correction which has a nontrivial structure which we discuss. Results are compared to data and to other calculations.

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