

Abstract Submitted
for the MAR05 Meeting of
The American Physical Society

Temperature dependent spin susceptibility in a two-dimensional metal VICTOR GALITSKI, Kavli Institute for Theoretical Physics and Physics Department, University of California, Santa Barbara, CA 93106, ANDREY CHUBUKOV, Department of Physics, University of Maryland, College Park, MD 20742-4111, SANKAR DAS SARMA, Condensed Matter Theory Center, Department of Physics, University of Maryland, College Park, MD 20742-4111 — We consider a two-dimensional electron system with Coulomb interaction between particles at a finite temperature T . The Kohn singularity in the response function leads to a linear- in- T correction to the quasiparticle g -factor and the spin susceptibility. We show that the universal linear temperature correction is a generic property of a strongly interacting electron system.

Olexei Motrunich
KITP

Date submitted: 24 Jan 2005

Electronic form version 1.4