

Abstract Submitted  
for the MAR13 Meeting of  
The American Physical Society

**Quantum criticality of reconstructing Fermi surfaces** JUNHYUN LEE, PHILIPP STRACK, SUBIR SACHDEV, Harvard University — We present a functional renormalization group analysis of a quantum critical point in a two-dimensional metal involving Fermi surface reconstruction due to the onset of spin density wave order. The critical theory is controlled by a fixed point in which the order parameter and fermionic quasiparticles are strongly coupled, and acquire spectral functions with a common dynamic critical exponent. We obtain results for critical exponents, and for the variation in the quasiparticle spectral weight around the Fermi surface.

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Date submitted: 09 Nov 2012

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