

Abstract Submitted  
for the MAR07 Meeting of  
The American Physical Society

**Theory of STM Spectroscopy in Luttinger Liquids with a Spin Gap** AKBAR JAEFARI, EDUARDO FRADKIN, Department of Physics, University of Illinois at Urbana-Champaign — We discuss the problem of tunneling of electrons into a Luttinger liquid with a spin gap for a semi infinite one-dimensional system. This system is of interest for a problem of STM spectroscopy of a spin-gap Luttinger liquid with a backscattering impurity. We will discuss this problem using semi-classical and refermionization methods.

Akbar Jaefari  
Department of Physics, University of Illinois at Urbana-Champaign

Date submitted: 17 Nov 2006

Electronic form version 1.4