Abstract Submitted
for the MAR05 Meeting of
The American Physical Society

Nonlinear ac conductivity of interacting 1d electron systems THOMAS NATTERMANN, BERND ROSENOW, University of Cologne — We consider low energy charge transport in one-dimensional (1d) electron systems with short range interactions under the influence of both periodic and random potentials. Combining RG and instanton methods, we calculate the nonlinear ac conductivity and discuss the crossover between the nonanalytic field dependence of the electric current at zero frequency and the linear ac conductivity at small electric fields and finite frequency.

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Date submitted: 01 Dec 2004 Electronic form version 1.4