

Abstract Submitted  
for the MAR13 Meeting of  
The American Physical Society

**Anomalies in nonlinear transport of two-dimensional electron gas**<sup>1</sup> QUENTIN EBNER, MICHAEL ZUDOV, School of Physics and Astronomy, University of Minnesota, Minneapolis, Minnesota 55455, LOREN PFEIFFER, KENNETH WEST, Department of Electrical Engineering, Princeton University, Princeton, New Jersey 08544 — When a dc current is passed through a high-mobility two-dimensional electron system subject to a weak magnetic field, its differential resistivity exhibits periodic oscillations as a function of applied current. The waveform of these oscillations, known as Hall field-induced resistance oscillations, is well established both experimentally and theoretically. In this talk we will present experimental data which show dramatic deviations of the oscillation waveform from the theoretically predicted.

<sup>1</sup>The work at Minnesota was supported by the DOE Grant DE-SC0002567. The work at Princeton was partially funded by the Gordon and Betty Moore Foundation and by the NSF MRSEC Program through the Princeton Center for Complex Materials (DMR-0819860).

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Date submitted: 28 Nov 2012

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