Distinct microwave photoresistivity peak in a high-mobility quantum Hall system\textsuperscript{1} A.T. HATKE, M.A. ZUDO\textsuperscript{V}, University of Minnesota, L.N. PFEIFFER, K.W. WEST, Princeton University — We report on a distinct resistivity peak in a microwave-irradiated high-mobility two-dimensional electron system at low temperatures. This peak appears in the regime of well separated Landau levels near the second harmonic of the cyclotron resonance and is in addition to microwave-induced resistance oscillations. This talk will focus on the generic characteristics of this peak, such as its dependence on microwave power and temperature.

\textsuperscript{1}This work is supported by DOE DE-SC0002567 and NSF DMR-0548014.

Michael Zudov
University of Minnesota

Date submitted: 06 Dec 2010

Electronic form version 1.4