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Hall-field induced resistance oscillations in tilted magnetic fields MICHAEL ZUDOV, ANTHONY HATKE, University of Minnesota, LOREN PFEIFFER, KEN WEST, Princeton University — When a large enough dc current is passed through a high-mobility two-dimensional electron system its differential resistivity exhibits oscillations with the applied magnetic field. These oscillations, known as Hall field-induced resistance oscillations, are believed to originate from impurity scattering between Landau levels tilted by Hall field potential. This talk will present the results of our recent experiments studying Hall field-induced resistance oscillations in tilted magnetic fields. The results show that the oscillations are strongly suppressed by in-plane magnetic field.

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