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Evidence for reentrant striped phases in a two-dimensional hole system MICHAEL MANFRA, Bell Laboratories, Z. JIANG, NHMFL, HORST STORMER, Dept. of Physics, Columbia University, D. C. TSUI, Princeton University, LOREN PFEIFFER, K. W. WEST, A. M. SERGENT, Bell Laboratories, Lucent Technologies — Anisotropic transport is observed at low temperatures in the N=1 and N=2 Landau levels of a very clean two-dimensional (2D) hole system. At $\nu = 7/2$ and $\nu = 11/2$, the longitudinal magnetoresistance develops strong anisotropies which depend on the direction of current flow and temperature. Interestingly, the transport at $\nu=9/2$ is *isotropic* for all temperatures. Our results for a two-dimensional hole system contrast sharply with 2D electron transport where no anisotropy has been observed in the N=1 Landau level, the strongest anisotropy occurs at $\nu=9/2$, and no reentrant behavior is evident.

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