Abstract Submitted
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Metal-insulator transition in 2D: comparison between experiment and Punnoose-Finkelstein's theory[1] S. ANISSIMOVA, A. A. SHASHKIN, S. V. KRAVCHENKO, Northeastern University, T. M. KLAPWIJK, TU Delft — New theory of the 2D metal-insulator transition (Punnoose and Finkelstein, Science 310, 289 (2005)) explains all most striking features of this phenomenon — temperature-independent separatrix between metallic and insulating phases, destruction of the metallic state by magnetic field, critical behavior of the spin susceptibility and dramatic enhancement of the effective mass in the vicinity of the transition. We will report detailed comparison between our experiments and this theory.

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