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Satisfaction of Kohler's rule in the pseudogap phase of the high-temperature superconductor $HgBa_2CuO_{4+\delta}$[1] YANG GE, M. CHAN, M. VEIT, C. DORROW, W. TABIS, M. GREVEN, Univ of Minn - Minneapolis, B. VIGNOLLE, C. PROUST, Laboratoire National des Champs Magnétiques Intenses, France, X. ZHAO, Jilin Univ, China, N. BARIŠIĆ, Technical University of Vienna, Austria — We report on the temperature and magnetic field evolution of the planar resistivity in the simple tetragonal high-temperature superconductor $HgBa_2CuO_{4+\delta}$ (Hg1201). Counter to the longstanding view that Kohler's rule is universally strongly violated in the cuprates, we find that it is in fact satisfied in the pseudogap state. The magnetoresistance shows a T^{-4} temperature dependence which, in conjunction with previous work demonstrating $\rho \propto T^2$ [1] as well as quadratic temperature and frequency dependence of the dynamical relaxation rate [2], is indicative of a Fermi-liquid quasiparticle scattering in the pseudogap phase of Hg1201. [1] N. Barišić et al., Proc. Natl. Acad. Sci. US 110, 12235 (2013). [2] S.I. Mirzaei et al., Proc. Natl. Acad. Sci. US 110, 5774 (2013)

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