Abstract Submitted for the MAR06 Meeting of The American Physical Society

Linear Temperature Dependence of the Resistivity in the Pseudogap State A.A. ABRIKOSOV, Materials Science Division, Argonne National Laboratory, USA — A concept is proposed, explaining the characteristic features of the in-plane resistivity of high- $T_c$  layered cuprates above  $T_c$ : quasi-linear temperature dependence and absence of the residual resistance in the extrapolation of the curve  $\rho(T)$  from  $T > T_c$  to T = 0. This concept is based on the idea of the pseudogap state structure described in previous works by the present author. This work was supported by the Department of Energy under the contracts # W-31-109- ENG-38.

> A. A. Abrikosov Materials Science Division, Argonne National Laboratory, USA

Date submitted: 13 Dec 2005

Electronic form version 1.4