Abstract Submitted for the MAR08 Meeting of The American Physical Society

PercolationTheoryofthePseudogapPhase¹ ALEXEIABRIKOSOV, Argonne National Laboratory— A concept ofthe pseudogap state in high- T_c layered cuprates on the basis of percolation theoryis proposed. Contrary to the self-consistent BCS critical temperature, which defines T^* - the upper boundary of the pseudogap state, the real critical temperature, T_c ,is defined, as the percolation threshold, where the infinite cluster appears. Thispermits to obtain the exact formula for T_c , as function of doping and understand its"dome-like" shape.

 $^1\mathrm{This}$ work was supported by the US Department of Energy under Contract No. DE-AC02-06 CH1135.

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Date submitted: 12 Nov 2007

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