Abstract Submitted
for the MAR10 Meeting of
The American Physical Society

Finite-Size Scaling in Random K-SAT Problems MEESOON HA, SANG HOON LEE, CHANIL JEON, HAWOONG JEONG, Dept. of Physics, KAIST — We propose a comprehensive view of threshold behaviors in random K-satisfiability (K-SAT) problems, in the context of the finite-size scaling (FSS) concept of nonequilibrium absorbing phase transitions using the average SAT (ASAT) algorithm. In particular, we focus on the value of the FSS exponent to characterize the SAT/UNSAT phase transition, which is still debatable. We also discuss the role of the noise (temperature-like) parameter in stochastic local heuristic search algorithms.

Meesoon Ha
Dept. of Physics, KAIST

Date submitted: 22 Nov 2009 Electronic form version 1.4