Abstract Submitted for the MAR05 Meeting of The American Physical Society

Analysis of a yeast cell cycle model CHAO TANG, NEC Labs America, YING LU, Rockefeller University, FANGTING LI, QI OUYANG, MINGYUAN ZHONG, Peking University — We have analyzed a model network of yeast cell-cycle regulation, which consists of a set of ordinary differential equations with about 90 parameters. We show that this dynamical system has very stable and robust global fixed points which correspond to the biological checkpoints. The biological pathway corresponds to a globally attracting trajectory of the system.

> Chao Tang NEC Labs America

Date submitted: 30 Nov 2004

Electronic form version 1.4