Andrzej Korzeniowski* (korzeniowski@uta.edu), Box 19408, 411 S. Neddermann Drive, Arlington, TX 76019-0408. Mean Reversal for Transformed Dynamical Systems. Preliminary report.

Consider two random dynamical systems whose expected values are negative and decrease over time, which can be thought of as two games that lose on average. We examine various models devised from the original ones by either deterministic coupling or random mixing in such a way that the resulting dynamical system displays a rather counter-intuitive behavior. Paradoxically, the new system has positive expected values, i.e., it is possible to combine two losing games into a winning one. (Received September 28, 2005)