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Anushaya Mohapatra* (am87@rice.edu), TX , and **William Ott** (ott@math.uh.edu).

Memory loss for nonequilibrium open dynamical systems.

We introduce a notion of conditional memory loss for nonequilibrium open dynamical systems. We show that this type of memory loss occurs at an exponential rate for nonequilibrium open systems generated by one-dimensional piecewise-differentiable expanding Lasota-Yorke maps. This result may be viewed as a prototype for time-dependent dynamical systems with holes. (Received February 10, 2014)