1056-37-1243 Chinmaya Gupta* (ccgupta@math.uh.edu), University of Houston, Department of Mathematics, 651PGH, 4800 Calhoun Rd, Houston, TX 77204, and Mark Holland and Matthew Nicol. Extreme value theory for some dynamical systems. Preliminary report.

Extreme value theory for dynamical systems concerns the limiting distribution of successive maxima or minima of the time-series arising from an observable on a dynamical system. For some dynamical systems it can be shown that the maximum of the time series behaves as if it was the maximum of an independent, identically distributed random sequence. We show that this is the case for some well-known examples of dynamical systems, such as hyperbolic billiards and Lozi-like maps. (Received September 21, 2009)