Joseph M Rosenblatt* (joserose@iupui.edu), Department of Mathematical Sciences, IUPUI, 402 N. Blackford Street, Indianapolis, IN 46202. Error distortion rates in quantization via orbits. Preliminary report.

We consider the rates of approximation by orbits generated by IID, number theoretic, or dynamical models. These rates relate to non-parametric statistics in the case of IID models, Diophantine approximation in the case of number theoretic models, and hitting shrinking targets in the case of dynamical models. (Received January 24, 2018)