CHAOTIC MAPS ON MEASURE SPACES AND THE BEHAVIOR OF ORBITS OF STATES

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ABSTRACT:

We introduce maps with *n* laps on measure spaces and consider chaotic properties in those maps. Our purpose is to study behavior of orbit of probability density function instead of orbit of point. We show that a typical property of chaotic map converges to a unique function determined by the map in the case of orbit of probability density function though it is sensitive dependence on initial conditions in the case of orbit of point.

Keywords: measure, states, maps with n laps,Ferron-Frobenius, chaotic, endomorphism