

Abstract

Invariant probability measures can be studied through their projections. In particular, the study of barycenters of these invariant measures has received much attention in recent years. K.C.Chen and X.Dong (2010 [3]) found a way to construct different orbits with the same barycenter for the tent map. It can be seen as that many invariant measures have overlapped projection along the direction $f(x) = x$. This motivates us to consider: when can invariant measures corresponding to two distinct transformations have overlapped projection along some direction? This thesis aims to discuss this problem.

