
ALBERT FISHER, University of Sao Paulo

Finite and infinite measures for adic transformations

We classify the invariant Borel measures for adic transformations of finite rank which are finite on the path space of some sub-Bratteli diagram. Key ingredients of the proof include an appropriate definition of distinguished eigenvector sequence, a nonstationary Frobenius–Victory theorem, and the notions of adic tower and canonical cover: the measure may be locally infinite on the original space but is always locally finite on the cover space. This extends theorems of Bezuglyi, Kwiatkowski, Medynets and Solomyak, and Karpel. An application is given to nested circle rotations, where our necessary and sufficient condition for the measure to be infinite is expressed in terms of continued fractions.

(Joint work with Marina Talet)