

1102-37-188

Ben Hayes*, 1326 Stevenson Center Ln, Nashville, TN 37235. *Sofic Entropy via Polish Models.*

Entropy for actions of a sofic group on a probability space or compact space has been defined by Lewis Bowen, David Kerr and Hanfeng Li. Further, there is a version of sofic measure entropy in the presence of a compact model (i.e. assuming that the probability space is a compact space with and the action is by homeomorphisms). We show how to define sofic entropy in the presence of a Polish model. Applications include the entropy of Gaussian actions, as well as deducing information about the Koopman representation from positive or complete positivity of entropy. (Received July 28, 2014)