

VARIATIONAL PRINCIPLES FOR METRIC MEAN DIMENSION

Yonatan Gutman

(Institute of Mathematics of the Polish Academy of Sciences, Warszawa, Poland)

E-mail: y.gutman@impan.pl

Entropy has been a fundamental concept in the theory of dynamical systems from its beginnings. Together with the newer concept of mean dimension, these invariants can be related to various embeddings in shift spaces. An important result from 1970, known as the "variational principle" relates topological and measurable entropies. Recently various variational principles relating metric mean dimension and (variants of) measurable entropy have been proven. We will survey some of these old and new developments. Based on joint work with Adam Śpiewak.