

## Entropy and the stretching of subcontinua

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*Abstract.* Let  $f : X \rightarrow X$  be a continuous function of a compact metric space. Entropy loosely measures the rate of mixing of the function. Let the Cantor set be defined by  $C = \prod_{i=-\infty}^{\infty} \{1, 2, \dots, N\}$  and  $\sigma : C \rightarrow C$  be the shift homeomorphism. Then it is well known that the entropy of  $\sigma$  is  $\log(N)$ . Often, maps on continua that have positive entropy exhibit this type of behavior. However, maps on chainable continua that have positive entropy also appear to exhibit other phenomena: the stretching of subcontinua. In my talk, I will discuss possible ways to detect if the entropy of a function is due to stretching or just shifting.