

# Entropy and edit distances in ergodic theory

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**Abstract** The entropy is a classical invariant in the ergodic theory that stays outside of the spectral analysis. The original concept of Shannon measure of information was adapted to the ergodic theory by Kolmogorov and developed further by Sinai, Bowen and others. These works culminated in Ornstein's theory that studies i.i.d. systems and their mutual relations. An interested fact is that this theory combined the entropy with another concept from information theory, namely the Hamming distance. In our talk, we would like to present the connection between the Hamming distance, and other edit distances, and entropy in more details and show some recent developments.