

K. KELLER, A. UNAKAFOV, V. UNAKAFOVA

## Determining and estimating the Kolmogorov-Sinai entropy

*Institute of Mathematics , University of Lübeck  
E-mail: keller@math.uni-luebeck.de*

Recent results show that there is a close relation of the Kolmogorov-Sinai entropy and the relatively new concept of Permutation entropy. We discuss why this is interesting for applications in the life sciences and give some overview on the newest results and on open problems concerning the relation of both entropies. Moreover, we demonstrate that some modifications of the permutation entropy could be interesting for estimating the Kolmogorov-Sinai entropy.