Sofic Entropy

Marcel Mroczek Jagiellonian University

Abstract

Kolmogorov-Sinai entropy is defined with \mathbb{Z} or lattice \mathbb{Z}^d as acting group and can be generalised to amenable groups and further yet to sofic groups. During the talk i will present some motivation and counterarguments concerning this generalisation, define sofic groups and prove some of their properties. After this preparation I will introduce sofic entropy of a process with some examples. Then I will talk about the relationship of sofic entropy with other notions of entropy when they coincide.