Dynamical properties of minimal Ferenczi subshifts

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Abstract.

Rank-one systems are a class of measure-theoretic dynamical systems arising in the late 60's and constitute a rich class of examples and counter-examples in ergodic theory. Notably, the Chacon map was the first known explicit example of a weakly mixing transformation which is not mixing. However, a complete classification of the dynamical properties of rank-one systems still remains open. From the point of view of topological dynamics, we consider symbolic models of rank-one systems, that we decide to call "Ferenczi subshifts". In this talk, we will provide an explicit S-adic representation of minimal Ferenczi subshifts and discuss how it can be used to study some dynamical properties of these subshifts. We will be particularly interested in the computation of the dimension group that characterises strong and weak orbit equivalence and the computation of continuous and measurable eigenvalues.