

TAMENESS OR OTHERWISE FOR SOME PISOT SUBSTITUTION SHIFTS

REEM YASSAWI

ABSTRACT. The Ellis semigroup of a topological \mathbb{Z} -action (X, T) is the compactification of T in X^X , with the topology of pointwise convergence. A topological dynamical system is “tame” if its Ellis semigroup has cardinality that is at most the cardinality of the continuum; otherwise it contains a copy of the Stone-Čech compactification of \mathbb{Z} . In joint work with Jake Sudbery, we investigate these notions for some illustrious Pisot substitution shifts, using their underlying numeration systems.