
REEM YASSAWI, Trent University and McGill University

Adic representations of one sided substitution subshifts

Given a substitution τ defined on an alphabet \mathcal{A} , we can consider either the 1-sided or 2-sided subshifts generated by τ , denoted $(X_{\tau}^{\mathbb{N}}, \sigma)$, and $(X_{\tau}^{\mathbb{Z}}, \sigma)$ respectively. We show that for a large class of substitutions τ , $(X_{\tau}^{\mathbb{N}}, \sigma)$ has a representation as an adic system. We also show by example that conjugacy of the 2-sided substitution subshifts $(X_{\tau_1}^{\mathbb{Z}}, \sigma)$ and $(X_{\tau_2}^{\mathbb{Z}}, \sigma)$ does not imply conjugacy of $(X_{\tau_1}^{\mathbb{N}}, \sigma)$ and $(X_{\tau_2}^{\mathbb{N}}, \sigma)$, and discuss conditions on the substitutions so that 2-sided conjugacy would imply 1-sided conjugacy.