A construction of Mary Rees

Judy Kennedy (Lamar University)
`kennedy9905@gmail.com`

Abstract: Mary Rees made a construction around 1980 that allowed her to modify a minimal homeomorphism on a torus to produce one with positive entropy. There has been much recent interest in her construction and quite a few new examples of homeomorphisms produced using it. Most recently J. Boronski and P. Oprocha used it to produce a homeomorphism on a pseudoarc with positive non-infinite entropy. We would like to generalize the Rees construction further and really figure out what makes it work, as well as use it to produce more examples. This is very much work in progress, and is joint with Ivon Vidal Escobar, Jan Boronski, Piotr Oprocha, and Xiaochuan Liu.