

## The group of automorphisms of a zero entropy subshift

The symmetries of a symbolic dynamical system  $X$  form an interesting and often quite complicated group called its automorphism group. Although this group is always countable, it is frequently extremely complicated for positive entropy subshifts (containing free subgroups, the fundamental group of every 2-manifold, and every finite group). By contrast, the group of automorphisms of a zero entropy subshift seems to be considerably more tame and it has been possible to prove a number of strong algebraic results. In this talk I will discuss some of these results and recent joint work with B. Kra, J. Franks, and S. Petite in which we provide the first nontrivial examples of groups that cannot embed into the automorphism group of any zero entropy subshift.