

1046-37-1664

Nicholas E Long* (longne@sfasu.edu), Stephen F. Austin State University, Department of Mathematics and Statistics, P.O. Box 13040, SFA Station, Nacogdoches, TX 75962-3040. *Fixed Point Shifts of Inert Involutions.*

Given a mixing shift of finite type X , we consider what subshifts of finite type $Y \subset X$ can be realized as the fixed point shift of an inert involution of X . We establish a condition on the periodic points of X and Y that is necessary for Y to be the fixed point shift of an inert involution of X . If the zeta function of X is 1 mod 2, we show that this condition is sufficient to realize Y as the fixed point shift of an involution, up to shift equivalence on X . Given an inert involution f on a mixing shift of finite type X , we characterize what f -invariant subshifts can be realized as the fixed point shift of an inert involution. (Received September 16, 2008)