

Title: Skew products which are not standard

Abstract:

For any function f on the unit circle and T_t a flow, we can form the skew product extension $\hat{T}_f(x, \omega) = (2x \bmod 1, T_{f(x)}(\omega))$. Like the T, T^{-1} map, this is a random walk on a random scenery. The talk will focus on the proof that for f satisfying a Hölder condition with $\int f = 0$ and T_t a positive-entropy flow, the sequence of random variables arising from \hat{T}_f is not standard. The proof follows the method used by Hecklen and Hoffman to prove that the T, T^{-1} endomorphism is not standard.