

1009-37-88

Karl Petersen* (petersen@math.unc.edu), Department of Mathematics, CB 3250, Phillips Hall, University of North Carolina, Chapel Hill, NC 27599. *Dynamics of Some Nonstationary Adic Systems.*

Nonstationary adic (Bratteli-Vershik) systems raise important questions of fundamentally different kinds than those encountered in the study of Cantor minimal systems. Even for very regular graphs, such as the one associated with the Pascal triangle, although some dynamical properties have been established a complete understanding of the spectra, the determination of the various kinds of rank, analysis of the commutants and joinings, and a reasonable approach towards classification are missing. The Euler graph and its variations present phenomena of yet another kind, with connections to nonhomogeneous random walks and random permutations with fixed numbers of rises. We discuss several recent results in this area and indicate some of the directions of current work. (Received August 08, 2005)