

1047-37-20

Karl Petersen* (petersen@math.unc.edu), Department of Mathematics, CB 3250 Phillips Hall, University of North Carolina, Chapel Hill, NC 27599. *Sturmian adic dynamical systems in the Stern-Brocot (Farey) diagram*. Preliminary report.

When drawn as a Bratteli diagram, the Stern-Brocot picture leads not only to interesting C^* algebras but also Bratteli-Vershik (adic) dynamical systems. In particular, all irrational circle rotations and thus the Sturmian symbolic dynamical systems which encode them appear via subdiagrams. In general, there are relations among closed invariant sets and ideals in the operator algebra. Some of these observations are joint work with Thierry de la Rue and Elise Janvresse. (Received November 18, 2008)