

1117-37-47

Michael Damron* (mdamron6@gatech.edu), School of Mathematics, Georgia Institute of Technology, 686 Cherry St., Atlanta, GA 30332, and **Jon Fickenscher** (jonfick@princeton.edu), Department of Mathematics, Fine Hall, Washington Rd., Princeton, NJ 08544. *The number of ergodic measures for minimal shifts of low complexity.*

Consider a one-dimensional minimal shift on a finite alphabet, and let $p(n)$ be the number of distinct words in the system of size n . In 1985, M. Boshernitzan proved that if $\liminf_n p(n)/n = \alpha$ is finite, then the system has at most $\lfloor \alpha \rfloor - 1$ ergodic measures. This bound was recently shown to be tight by V. Cyr and B. Kra, but no improvement has been found. I will discuss work with J. Fickenscher in which we show an improved bound in the setting of “eventually constant complexity growth,” meaning that $p(n) - p(n - 1)$ is eventually constant. The methods involve introducing and analyzing what we call Special Rauzy Graphs, which allow us to track the interdependencies of words of size n as n increases. (Received December 24, 2015)