

1094-37-320

Romain Aimino (aimino@cpt.univ-mrs.fr), **Matthew Nicol*** (nicol@math.uh.edu) and **Mike Todd** (mjt20@st-andrews.ac.uk). *Recurrence statistics for the space of Interval Exchange Maps and the Teichmüller flow on the space of translation surfaces*. Preliminary report.

We show that the transfer operator of the Rauzy-Veech-Zorich renormalization map for interval exchange transformations acting on a space of quasi-Hölder functions is quasicompact and derive certain statistical recurrence properties for this map and its associated Teichmüller flow. We establish Borel-Cantelli lemmas, extreme value statistics and return time statistics for the map and flow. This is joint work with Romain Aimino and Mike Todd. (Received August 26, 2013)