

1096-37-1919

Jane Wang* (jywang@princeton.edu), **Francisc Bozgan**, **Anthony Sanchez**, **Cesar E Silva** and **David Stevens**. *Weak Rational Ergodicity and Rank-One Transformations*. Preliminary report.

We show that all rank-one infinite measure-preserving transformations are subsequence weakly rationally ergodic and rank-one transformations with a bounded number of cuts are weakly rationally ergodic, extending work of Dai, Garcia, Padurariu, and Silva. We further prove that there exist rank-one transformations that are not weakly rationally ergodic. We also study the properties of zero type and multiple recurrence for rank-one infinite transformations. (Received September 16, 2013)