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Howard Masur* (masur@math.uchicago.edu), 5734 S. University, Chicago, IL 60637. *Ergodic Theory of Interval Exchange Transformations.*

Interval exchange transformations are an interesting class of dynamical systems. An IET is determined by a collection of d positive numbers and a permutation on d letters. Many years ago Veech and Keane constructed examples which are minimal but not uniquely ergodic. For a given permutation the set of (normalized) interval exchanges on d intervals forms a standard $d-1$ dimensional simplex. One can ask how big is the subset of minimal non uniquely ergodic interval exchanges. It is known that it has measure zero. In this talk, after giving background, I will discuss the theorem, joint with Jonathan Chaika that for certain permutations and d at least 4, the Hausdorff dimension is exactly $d-3/2$. (Received February 27, 2017)