

Subgroups of Interval Exchange Transformations

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An interval exchange transformation (IET) is a bijective map $f : I = [0, 1) \rightarrow [0, 1)$ defined by a finite partition of I into half-open subintervals and a reordering of these intervals by translations. We denote by IET the group consisting in all IETs. The IETs have been a very popular subject of study in ergodic theory: most papers on IETs concern specific dynamical and spectral properties (minimality, ergodicity, mixing properties \dots) of a single map. In this talk, I will address certain questions on the group-theoretical structure of IET and the question I will focus on is what abstract groups can be represented as subgroups of IET . I will discuss examples and properties of certain subgroups in IET . This is a joint work with Nancy Guelman.