

ON SELF-SIMILARITY FOR ERGODIC FLOWS

KRZYSZTOF FRACZEK

Given an ergodic flow $(T_t)_{t \in \mathbb{R}}$ we study the problem of its self-similarities, i.e. we want to describe the set of these real s for which the original flow is isomorphic to the flow $(T_{st})_{t \in \mathbb{R}}$. The problem is examined in some classes of special flows over irrational rotations and over interval exchange transformations. In particular translation flows on translation surfaces are considered, and, in such a case, it is proved that, under the weak mixing condition, the set of self-similarities has Lebesgue measure zero. For von Neumann special flows this set is turned out to be trivial. The talk is based on a joint work with M. Lemanczyk.