Stefanos Orfanos (sorfanos@depaul.edu), Ayse A. Sahin\* (ayse.sahin@wright.edu) and Ilie Ugarcovici (iugarcov@depaul.edu). Orbit structure and orbit equivalence for actions of semi-direct product groups. Preliminary report.

We will discuss actions of semi-direct product groups of the form  $G = \mathbb{Z}^d \rtimes_A \mathbb{Z}$  where  $A \in M(2,\mathbb{Z})$  with det(A) = 1. We discuss the interplay between continuous orbit equivalence and the geometry of the group. (Received September 25, 2018)