1139-37-106 **Stefanos Orfanos**, **Ayşe Şahin*** (`ayse.sahin@wright.edu`) and **Ilie Ugarcovici**. *Classifying general odometers: spectrum, geometric group theory, and orbit equivalence.* Preliminary report.

We discuss odometer actions of semi-direct product groups of the form $G = \mathbb{Z}^d \rtimes_A \mathbb{Z}$ with $A \in GL_d(\mathbb{Z})$. We discuss their classification in terms of the geometry of the underlying subgroups, their spectrum, and their continuous topological orbit equivalence class. (Received February 04, 2018)

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