

EIGENVALUES AND STRONG ORBIT EQUIVALENCE

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We consider Cantor minimal systems up to (topological) orbit equivalence, i.e., when there exists a homeomorphism that maps each orbit of one system to the one of the other system. In a joint work with F. Durand and M.I. Cortez, we show that the dynamical spectrum has some restrictions within a class of orbit equivalence. Actually, the additive group of continuous eigenvalues $E(X, T)$ of the minimal Cantor system (X, T) is a subgroup of the intersection $I(X, T)$ of all the images of the dimension group by its traces. We show, whenever the infinitesimal subgroup of the dimension group associated to (X, T) is trivial, the quotient group $I(X, T)/E(X, T)$ is torsion free.