

# SOME ALGEBRAIC ASPECTS OF DYNAMICS ON CANTOR SET

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ABSTRACT. In this talk the existence of real co-boundaries associated to continuous eigenvalues of a Cantor minimal system  $(X, T)$  is investigated. We will discuss how these co-boundaries make relation between the rank of *dimension group*,  $K^0(X, T)$ , and rank of the additive group of spectrum of the Cantor minimal system. In this context, some sufficient conditions are arisen to construct weakly mixing Cantor minimal systems which are not orbit equivalent to any system with non-trivial spectrum. The talk is based on a joint work with Thierry Giordano and David Handelman at University of Ottawa.

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