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Recursive Decomposition of a C^ -subalgebra of $C^*(R, X)$.* Preliminary report.

Crossed product of C^* -algebras by locally compact groups have been studied widely. When the group is the the group of integers Z , and when the C^* -algebras is the continuous functions on compact metric spaces $C(X)$, it is shown that, in some cases, the crossed product has tracial rank zero. The crossed product having tracial rank zero was shown, by Lin and Phillips, by looking at a subalgebra that has a recursive structure. In this presentation, we briefly introduce the crossed product of $C(X)$ by the reals R . We then will discuss how to find a subalgebra of the crossed product of $C(X)$ by R , analogous to the one in the integer case, that has an recursive structure. (Received September 23, 2009)