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Nuclearity for partial crossed products by exact discrete groups

Important classes of C*-algebras can be described as partial crossed products. Even though a partial action of a discrete group on a C*-algebra is in an appropriate sense always equivalent to a global action, the commutativity of the underlying C*-algebra may be lost under this correspondence. I will talk about a joint work with A. Buss and D. Ferraro, in which we generalise a result by Matsumura for ordinary actions by showing that the partial crossed product of a commutative C*-algebra by an exact discrete group is nuclear whenever the full and reduced partial crossed products coincide. We apply our results to show that the reduced semigroup C*-algebra $C^*_{\lambda}(P)$ of a submonoid of an exact discrete group is nuclear if the left regular representation on $\ell^2(P)$ is an isomorphism between the full and reduced C*-algebras.