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Non-commutative T-duality

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Let G be a (self-dual) locally compact abelian group, e.g. \mathbb{R}^n . The most prominent (endo) functor in the world of $G - C^*$ -dynamical systems is the crossed product functor. We introduce non-commutative T -duality as a duality theory of bundles of non-commutative tori. It gives rise to an invariant subcategory of this functor. We first review the classical T -duality and then discuss non-commutative T -duality in details.