PATRICK MELANSON, University of Regina

Pro-Tori and Inductive Limits of Non-Commutative Tori

It is a known result that the inductive limit non-commutative tori (also called irrational rotation algebras) can be realized as a non-commutative N-solenoid. Both of these are examples of twisted group C*-algebras. We can generalize to non-commutative d-tori (the higher dimensional analogue) and perform a similar analysis. That is, given a family of non-commutative d_k -tori, $d_k > 1$, and a sufficiently nice embeddings (that is, unital *-homomorphisms), we can realize their inductive limit as a twisted C*-algebra, analogous to a higher dimensional non-commutative N-solenoid.