
QINGYUN WANG, University of Toronto

Tracial Rokhlin property and non-commutative dimensions

Tracial Rokhlin property for finite group actions on C^* -algebras was introduced by Chris Phillips to study the structure of the crossed product, which could be viewed as a finite group analogue of the classical Rokhlin lemma. In this talk, we will give a characterization of product-type actions with tracial Rokhlin property. Then we will show that, if $\alpha: G \rightarrow \text{Aut}(A)$ is a finite group action with the weak tracial Rokhlin property, where A is a α -simple unital C^* -algebra with either tracial rank zero, or real rank zero, or stable rank one, the same property on A passes to the crossed product $C^*(G, A, \alpha)$.