

A classification of Villadsen algebras

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Villadsen algebras is a class of simple unital approximately homogeneous (AH) C^* -algebras which are not Z -stable. This class contains C^* -algebras which share the same value of the conventional Elliott invariant with an AI algebra but are not isomorphic to that AI algebra. Hence Villadsen algebras are not covered by the classification theorem with the conventional Elliott invariant. In the talk, let us consider the Villadsen algebras with seed spaces finite products of a given finite-dimensional contractible metrizable space, and then they are shown to be classified by the KO -group together with the radius of comparison. This is a joint work with George Elliott and Chunguang Li.