

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
UNIVERSITY OF SOUTHERN DENMARK, ODENSE

Mathematics seminar

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Classification of certain crossed product C^* - algebras by endomorphisms

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IMADA Seminar Room

Abstract

The classification of separable, nuclear, purely infinite, simple C^* -algebras using K-theory was completed by Kirchberg and Phillips in the mid 90's. Since then, much effort has been put into finding K-theoretic invariants which classify separable, nuclear, purely infinite C^* -algebras which are not simple. One difficulty is that none of the obvious invariants which come to mind will do the trick. We will discuss a new K-theoretic invariant on C^* -algebras, which can be shown to classify a certain class of purely infinite C^* -algebras arising as crossed products by endomorphisms on certain "building block" C^* -algebras. This class contains all purely infinite graph C^* -algebras, thus finishing their classification.