MONDAY MORNING

Chris Phillips

Title: Towards the classification of outer actions of finite groups onpurely infinite algebras

Abstract: UCT Kirchberg algebras (purely infinite simple separable nuclear C*-algebras satisfying the Universal Coefficient Theorem) are knownto be determined up to isomorphism by K-theoretic invariants. Morerecently, a K-theoretic classification has been given for actions offinite groups on such algebras satisfying the Rokhlin property. Wedescribe progress toward such a classification under the much lessrestrictive condition that the action be pointwise outer, with thebest results being possible when the group is cyclic of prime order.

Ian Putnam

Title: Relative K-theory of some groupoid C^*-algebras

Abstract: I will recall the fairly standard definition of the relative K-theory for a C^*-algebra and a C^*-subalgebra. I will discuss a result which states that under some conditions two pairs have isomorphic relative K-theory. Finally, I will present some examples arising as groupoid C^*-algebras.

Huaxin Lin

MONDAY AFTERNOON

Mark Tomforde

Title: Classification of nonsimple graph C^*-algebras

Abstract: I will discuss recent progress on classifying nonsimple graph C^*-algebras. In particular, I will explain how graph C^*-algebras with one ideal are classified up to stable isomorphism by the associated six-term exact sequence in K-theory. I will also describe how to compute this invariant, and give a current account of work to determine the range of this invariant.

Hannes Thiel

Title: A characterization of semiprojectivity for commutative C^*-algebras.

Abstract: Let X be a compact, metric space. Then the following are equivalent:
  (1) $C(X)$ is semiprojective
  (2) X is an absolute neighborhood retract (ANR) of dimension at most one
This was conjectured by Blackadar. I will sketch a proof and present some applications, in particular for weak (semi)projectivity of commutative C^*-algebras.This is joint work with Adam Sørensen (University of Copenhagen).

Aaron Tikuisis

Title: Computing the Cuntz semigroup of $C(X, A)$

Abstract: I will discuss the computation of the Cuntz semigroup of $C(X, A)$ where A is a simple, unital, $\mathcal{Z}$-stable ASH algebra. The computation involves the Murray-von Neumann semigroup of quotients (of $C(X, A)$) along with the Cuntz semigroup of A (which was computed by Brown-Perera-Toms).

Ilijas Farah

TUESDAY

Ralf Meyer

Title: Generalisations of the UCT

Abstract: The Universal Coefficient Theorem implies that any isomorphism between theK-theory of two C^*-algebras in the bootstrap class lifts to aKK-equivalence. For more general classification results, we would like toreplace KK by equivariant analogue with respect to, say, finite groupactions or by its variant for C^*-algebras over a topological space. Howcan we generalise the Universal Coefficient Theorem to such situation?I will present some general machinery for this purpose and discuss someexamples worked out by my students Rasmus Bentmann and Manuel Köhler.

Guihua Gong

Title: ASH-inductive limits: Approximation by Elliott-Thomsen building blocks

David Kerr

Title: C^*-algebras and finite approximation in dynamics

Zhuang Niu
Title: A remark on AH algebras with diagonal maps

Eduard Ortega

Title: The Cuntz Semigroup and Comparison of Open Projections

Abstract: We show that a number of naturally occurring comparison relations onpositive elements in a C^*-algebra are equivalent to natural comparisonproperties of their corresponding open projections in the bidual of theC^*-algebra. In particular we show that Cuntz comparison of positiveelements corresponds to a comparison relation on open projections, that wecall Cuntz comparison, and which is defined in terms of-and is weakerthan-a comparison notion defined by Peligrad and Zsido. The lattercorresponds to a well-known comparison relation on positive elementsdefined by Blackadar. We show that Murray-von Neumann comparison of openprojections corresponds to tracial comparison of the correspondingpositive elements of the C^*-algebra. We use these findings to give a newpicture of the Cuntz semigroup.

Adam Sierakowski

Title: Purely infinite C^*-algebras arising from crossed products

Stuart White

Title: Near inclusions of C^*-algebras

WEDNESDAY

Hiroki Matui

Title: Classification of $\mathbb{Z}^N$-actions on simple C^*-algebras.

Abstract:I will discuss recent progress of the classification of(strongly) outer actions of $\mathbb{Z}^N$ (or more generally poly-$\mathbb{Z}$ groups)on unital Kirchberg algebras, UHF algebras and the Jiang-Su algebra.One of the main results says that outer actions of poly-$\mathbb{Z}$ groupsof rank two on unital Kirchberg algebras are completely classifiedup to cocycle conjugacy in terms of KK-theory.$\mathbb{Z}$-stability of certain crossed products is also discussed.

Wilhelm Winter

Title: Dimension, $\mathcal{Z}$-stability, and classification, ofnuclear C^*-algebras.

Karen Strung

Title: A technique to show certain C^*-algebras are TAI after tensoring with a UHF algebra.

Sara Arklint

Title: Beyond classification of Cuntz-Krieger algebras.

Abstract Ralf Meyer and Ryszard Nest has given an example of a finite space X over which there is no UCT. We show that for a smaller class of C^*-algebras over this space – including the Cuntz-Krieger algebras – one can still lift isomorphisms on the filtrated K-theory to $KK(X)$-equivalences.

THURSDAY MORNING

Efren Ruiz

Title: On the classification of non-simple real rank zero graph C^*-algebras.

Abstract: In this talk, we show that many graph C^*-algebras with finitely many ideals are classified by ordered filtrated K-theory. Our results generalize the results of Soren Eilers and Mark Tomforde for graph C^*-algebras with exactly one non-trivial ideal.

Francesc Perera

Title: Semigroup valued lower semicontinuous functions (with applications to theCuntz semigroup)

Abstract: In the analysis of the Cuntz semigroup of $C(X, A)$, the semigroupof functions on X with values on $Cu(A)$ appears naturally (byconsidering point evaluation). We analyse when this semigroup belongs tothe category Cu and how, for spaces of dimension at most 1, it relates wellto $Cu(C(X, A))$, for certain non simple C^*-algebras A. This is part ofa joint work with Ramon Antoine and Luis Santiago.

Ilan Hirshberg

Title: Rokhlin actions and nuclear dimension

Abstract: I will discuss some recent joint work with W. Winter andJ. Zacharias, showing that the property of having finite nucleardimension is preserved under forming crossed products by finite groupsor the integers satisfying a generalized Rokhlin property. For integeractions, this generalized Rokhlin property is generic (in the Bairecategory sense) for automorphisms of $\mathcal{Z}$-absorbing C^*-algebras.

THURSDAY AFTERNOON

Eberhard Kirchberg

Title: Spectra of C^*-algebras

Abstract: Partial results concerning primitive ideal spaces ofamenable C^*-algebras and actions of latticeson them will be outlined. In particular thoserelated to the following (open) questions:

(1) When does an upper semi-continuous actionof $\mathrm{Prim}(A)$ on (not necessarily exact)B come from a morphism $A \to M(B)$?
(2) Under which circumstances on the actionsof a lattice is an exact sequence equivariantsemisplit?
(3) Suppose that P is a closed point ofof a Dini space X, and that$X - P$ is a homeomorphic to $\mathrm{Prim}(B)$ of someamenable B. Does there exist amenable$A$ with X homeomorphic to $\mathrm{Prim}(A)$?
(4) Are all coherent Dini spaces Spectra$\mathrm{Prim}(A)$ of amenable C^*-algebras?

Simon Wassermann

Title: Simple non-amenable C^*-algebras with no proper tensor factorisations.

Abstract: The existence of unital simple C^*-algebras which are not isomorphic to a tensor product of two infinite dimensional C^*-algebras will be addressed. A continuum of non-isomorphic separable non-exact examples will be "exhibited".

George Elliott

Title: Inductive limits of matrix algebras over the circle

Abstract: The goal of this joint work in progress with AlinCiuperca, Leonel Robert, and Luis Santiago is to classify ATalgebras (approximate circle algebras) by means of Cuntzsemigroup related invariants. (These must in particularinclude all K-theory information, but also much more.)

Bruce Blackadar

Title: On the work of Simon Wassermann

FRIDAY MORNING

Iain Raeburn

Title: C^*-algebras related to dilation matrices

Thierry Giordano

Title: A generalization of the Voiculescu-Weyl-von Neumann theorem
Abstract:

Leonel Robert

Title: Classification of inductive limits of 1-dimensional NCCW-complexes