

Vanderbilt University, Department of Mathematics, Nashville, Tennessee, USA

**THE SIXTH ANNUAL SPRING INSTITUTE ON  
NONCOMMUTATIVE GEOMETRY AND OPERATOR ALGEBRAS**

*May 5 to May 14, 2008*

**Schedule of Talks**

**Monday, May 5, 2008**

9:25 am - 9:30 am *Welcome*  
9:30 am - 10:30 am *Nigel Higson - K-theory of representations I*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 12:00 pm *Georges Skandalis - KK-theory and applications I*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 2:50 pm *Robert Yuncken - Index theory for  $SL(n, C)$*   
3:00 pm - 3:50 pm *Larry Brown - Non-stable K-theory and extremally rich  $C^*$ -algebras*  
3:50 pm - 4:30 pm *Coffee Break*  
4:30 pm - 5:20 pm *Jacek Brodzki - Partial translation algebras for metric spaces*

**Tuesday, May 6, 2008**

9:30 am - 10:30 am *Georges Skandalis - KK-theory and applications II*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 12:00 am *Nigel Higson - K-theory of representations II*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 2:50 pm *Matilde Marcolli - Solvmanifolds and noncommutative tori with real multiplication*  
3:00 pm - 3:50 pm *John Roe - Foliations,  $C^*$ -algebras and controlled topology*  
3:50 pm - 4:30 pm *Coffee Break*  
4:30 pm - 5:20 pm *Guihua Gong - On the classification of inductive limit  $C^*$ -algebras*  
5:30 pm - 6:20 pm *Markus Pflaum - Regularized traces and relative cyclic cohomology*  
7:00 pm - *Dinner / Party (Microbiology Breezeway)*

### Wednesday, May 7, 2008

- 9:30 am - 10:30 am **Alain Connes** - *On the spectral characterization of manifolds I*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 12:00 am **Georges Skandalis** - *KK-theory and applications III*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 3:00 pm **Nigel Higson** - *K-theory of representations III*  
3:10 pm - 4:00 pm **Chris Phillips** - *Crossed products of irrational rotation algebras by finite subgroups of  $SL_2(\mathbb{Z})$  are AF*  
4:00 pm - 4:30 pm *Coffee Break*  
4:30 pm - 5:20 pm **Bertrand Monthubert** - *Groupoids, pseudodifferential calculus and Boutet de Monvel*

### Thursday, May 8, 2008

- 9:30 am - 10:30 am **Nigel Higson** - *K-theory of representations IV*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 12:00 am **Alain Connes** - *On the spectral characterization of manifolds II*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 3:00 pm **Mikael Rordam** - *Classification and strongly absorbing  $C^*$ -algebras I*  
3:10 pm - 4:10 pm **Georges Skandalis** - *KK-theory and applications IV*  
4:10 pm - 4:40 pm *Coffee Break*  
4:40 pm - 5:30 pm **Marius Dadarlat** - *On the K-theory of continuous fields of  $C^*$ -algebras*

### Friday, May 9, 2008

Day Off

### Saturday, May 10, 2008

- 9:40 am - 10:30 am **Michael Puschnigg** - *The cohomological assembly map*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 12:00 pm **Siegfried Echterhoff** - *A Mackey-machine for the Baum-Connes conjecture and the proof of the Connes-Kasparov conjecture I*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 3:00 pm **Mikael Rordam** - *Classification and strongly absorbing  $C^*$ -algebras II*  
3:10 pm - 4:10 pm **Alain Connes** - *On the spectral characterization of manifolds III*  
4:10 pm - 4:40 pm *Coffee Break*  
4:40 pm - 5:30 pm **Huaxin Lin** - *Asymptotic unitary equivalence and classification of simple  $C^*$ -algebras*

## Sunday, May 11, 2008

- 9:30 am - 10:30 am Eric Guentner/ Guoliang Yu - *K-theory and topological rigidity I*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 12:00 pm Siegfried Echterhoff - *A Mackey-machine for the Baum-Connes conjecture and the proof of the Connes-Kasparov conjecture II*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 3:00 pm Mikael Rordam - *Classification and strongly absorbing C\*-algebras III*  
3:10 pm - 4:00 pm Shmuel Weinberger - *Complete positive scalar curvature metrics revisited*  
4:00 pm - 4:30 pm *Coffee Break*  
4:30 pm - 5:30 pm Ralf Meyer - *Universal coefficient theorems for Kirchberg's bivariant K-theory I*

## Monday, May 12, 2008

- 9:30 am - 10:30 am Alain Connes - *On the spectral characterization of manifolds IV*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 11:50 am Joachim Cuntz - *C\*-algebras associated with commutative rings, number fields and function fields*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 3:00 pm Eric Guentner/ Guoliang Yu - *K-theory and topological rigidity II*  
3:10 pm - 4:10 pm Ralf Meyer - *Universal coefficient theorems for Kirchberg's bivariant K-theory II*  
4:10 pm - 4:40 pm *Coffee Break*  
4:40 pm - 5:40 pm Mikael Rordam - *Classification and strongly absorbing C\*-algebras IV*

## Tuesday, May 13, 2008

- 9:30 am - 10:30 am Alain Connes - *On the spectral characterization of manifolds V*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 11:50 am Marc Rieffel - *How can matrix algebras converge to the sphere (or other spaces)?*  
12:00 pm - 2:00 pm *Lunch Break*  
2:00 pm - 3:00 pm Gennadi Kasparov - *TBA*  
3:10 pm - 4:10 pm Eric Guentner/ Guoliang Yu - *K-theory and topological rigidity III*  
4:10 pm - 4:40 pm *Coffee Break*  
4:40 pm - 5:30 pm Romain Tessler - *K-theory and topological rigidity IV*

## Wednesday, May 14, 2008

- 9:30 am - 10:30 am Ralf Meyer - *Universal coefficient theorems for Kirchberg's bivariant K-theory III*  
10:30 am - 11:00 am *Coffee Break*  
11:00 am - 11:50 am George Elliott - *A canonical form of the Pimsner-Voiculescu embedding*  
12:00 pm - 12:50 pm Henri Moscovici - *Twisted spectral triples*

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*End of conference*



