

Noncommutative geometry, scattering theory and the Witten index

January 31 - February 4, 2011

organized by A.L. Carey (ANU), H. Grosse (Vienna), F. Gesztesy (Missouri),
F. Sukochev (UNSW)

- **Monday, January 31**

14:30 – 15:30: **Adam Rennie**: *Nonunital Index formulas*

15:30 – 16:00: **coffee**

16:00 – 17:00: **Victor Gayral**: *Noncompact noncommutative Geometries*

- **Tuesday, February 1**

10:00 – 11:00: **Fritz Gesztesy**: *The index formula and the spectral shift function for relatively trace class perturbations*

11:00 – 11:30: **coffee**

11:30 – 12:30: **Fritz Gesztesy**: *Index regularizations and the Witten index*

12:30 – 14:30: **lunch**

14:30 – 15:30 **Matthias Lesch**: *Chern-Connes character for manifolds with boundary*

- **Wednesday, February 2**

10:00 – 11:00: **Yuri Tomilov**: *Fredholm index and hyperbolicity*

11:00 – 11:30: **coffee**

11:30 – 12:30: **Fedor Sukochev**: *Relatively bounded and relatively trace class perturbations*

12:30 – 14:30: **lunch**

14:30 – 15:30: **Alexander Pushnitski**: *Scattering matrix and the spectral theory of discontinuous functions of self-adjoint operators*

Thursday and Friday are to be arranged.

All lectures take place in the ESI Schrödinger Lecture Hall