



# Prof. Dr. Alan Carey

## Semifinite Noncommutative Geometry and Applications

**ZEIT:**

23.4.2012

**ORT:**

Humboldt-Universität zu Berlin  
Institut für Mathematik  
Rudower Chaussee 25  
12489 Berlin

The lectures will start with an overview. I will then discuss some topics that I have been involved in over the last few years. These include von Neumann spectral flow and noncommutative geometry including a brief mention of K-theory and K-homology. Then I will discuss spectral triples and the local index formula and its relevance to semifinite index theory. If time permits I will say something about type III algebras and KMS states.

Talk 1: Mo, 23.4., 17:00-18:30, Hörsaal 1.013

Talk 2: Mi, 25.4., 16:30-18:00, Hörsaal 1.115

Talk 3: Mi, 2.5., 16:30-18:00, Hörsaal 1.013

**Kontakt:**

Humboldt-Universität zu Berlin . Institut für Mathematik  
SFB 647 . Unter den Linden 6 . 10099 Berlin  
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727  
sfb647@math.hu-berlin.de

[www.raumzeitmaterie.de](http://www.raumzeitmaterie.de)