

**Within the Senior Research Fellow Programme at the ESI the following
Lecture Courses will be given:**

Prof. John Barrett (Nottingham)

Wednesday 21.11.07 15:30-16:30

The classical Standard model and noncommutative Geometry

Prof. Richard Szabo (Edinburgh)

on

Nonperturbative aspects of noncommutative gauge theory

Tuesday 20.11.07 17:00-18:00

Wednesday 21.11.07 17:00-18:00

Thursday 22.11.07 17:00-18:00

Syllabus:

1. Moyal Spaces
2. Noncommutative Tori
3. Noncommutative Yang-Mills Theory
4. Gauge Invariant Observables
5. Background Independence
6. The Twisted Eguchi-Kawai Model
7. Exact Solution in Two Dimensions
8. The Elusive Wilson Loop

All lectures take place at the ESI Schrödinger Lecture Hall