

Conference on
Number Theory and Physics
March 16 – March 20 2009

Organizers: A. Carey, H. Grosse, D. Kreimer, S. Paycha, S. Rosenberg, N. Yui

Monday March 16

- 10.00 **Louise Nyssen**
Test vectors for trilinear forms
- 11.30 **Marcelo Laca**
Phase transition on the Toeplitz algebra of the affine semigroup over the natural numbers. (joint work with I. Raeburn)
- 14.30 **Jorge Plazas**
From Artin Motives to Endomotives
- 16.30 **Marie Françoise Ouedraogo**
The multiplicative anomaly for regularised determinants
-

Tuesday March 17

- 10.00 **Ryzard Nest**
tba
- 11.30 **Harald Grosse**
Renormalizable Noncommutative Quantum Field Theory
- 14.30 **Raimar Wulkenhaar**
Non-compact spectral triples with finite volume
-

Wednesday March 18

- 10.00 **Noriko Yui**
K3 surfaces with non-symplectic group actions, and their modularity
- 11.30 **Steve Rosenberg**
Chern-Simons classes on loop spaces
- 14.30 **Satoshi Kondo**
Two higher Chow groups of a scheme over a finite field

Thursday March 19

- 10.00 **Louis Boutet de Monvel**
Asymptotic equivariant trace and index
- 11.30 **Gabriel Baditoiu**
Lax pair equations and Feynman diagrams
- 14.30 **Christoph Bergbauer**
Remarks on renormalization in position space

Friday March 20

- 10.00 **Matthew Szczesny**
Feynman graphs and Hall algebras
- 11.30 **Martin Schlichenmaier**
Almost-graded central extensions of Lax operator algebras
- 14.30 **Carolina Neira**
Traces on pseudo-differential operators of negative order and related determinants

all lectures take place in the ESI Boltzmann lecture Hall