

Cortona 2014

Analysis and Topology in interaction

Program for Monday June 16th

9.00 - 9.55

Jim Davis (Indiana University)

Equivariant Rigidity

10.05 - 11.00

Grigori Avramidi (University of Utah)

Isometries of aspherical manifolds

11.00 - 11.30 Coffee break

11.35 - 12.30

Nigel Higson (Penn State University)

The noncommutative geometry of tempered representations

12.45 Lunch

16.00 - 16.30 Coffee break

16.30- 17.25

Dan Freed (University of Texas at Austin)

Matrix factorizations and Chern-Simons theory

17.35 - 18.30

Laurentiu Maxim (University of Wisconsin - Madison)

Intersection spaces, perverse sheaves and type IIB string theory

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Analysis and Topology in interaction

Program for Tuesday June 17th

9.00 - 9.55

Yokura/Schürmann (Kagoshima/Münster)

Fiberwise bordism groups and their bivariant analogues

10.05 - 11.00

Jim McClure (Purdue University)

The L-homology fundamental class for IP spaces

11.00 - 11.30 Coffee break

11.35 - 12.30

Pierre Albin (University of Illinois at Urbana-Champaign)

Hodge cohomology of Cheeger spaces

12.45 Lunch

16.00 - 16.30 Coffee break

16.30- 17.25

Sylvain Cappell (Courant Institute, NYU)

Unitary Representations of Three-Manifolds with Boundary

17.35 - 18.30

Oscar Randel-Williams (Cambridge)

Infinite loop spaces and positive scalar curvature

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Analysis and Topology in interaction

Program for Wednesday June 18th

9.00 - 9.20

Iakovos Androulidakis (University of Athens)

Singular foliations, holonomy and their use.

9.30 - 9.50

Francesco Bei (Humboldt)

The L^2 -Atiyah-Bott-Lefschetz theorem on manifolds with conical singularities: a heat kernel approach.

10.00 - 10.20

Henrik Rüping (Bonn)

Some approaches to the Farrell-Jones conjecture.

10.30 - 11.00

Paolo Antonini (Paris Orsay)

\mathbb{R}/\mathbb{Z} -K-theory, von Neumann algebras and flat bundles

11.00 - 11.30 Coffee break

11.30 - 11.50

Markus Land (Bonn)

The Analytical Assembly Map and Index Theory

12.00 - 12.20

Wolfgang Steimle (Bonn)

The space of metrics of positive scalar curvature.

12.30 - 13.00

Markus Upmeyer (Brussels)

Differential Cohomology, Refined Classes, and Canonical Gerbes

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Analysis and Topology in interaction

Program for Thursday June 19th

9.00 - 9.55

Robin Deeley (Clermont-Ferrand)

Geometric K-homology and Higson and Roe's analytic surgery exact sequence

10.05 - 11.00

Zhizhang Xie (Texas A& M)

Higher rho invariants and the moduli space of positive scalar curvature metrics

11.00 - 11.30 Coffee break

11.35 - 12.30

Charlotte Wahl (Göttinger Akademie der Wissenschaften, Hannover)

Index theoretic invariants associated to 2-cocycle twists for the spin Dirac and the signature operator

12.45 Lunch

16.00 - 16.30 Coffee break

16.30- 17.25

Sebastian Goette (Freiburg)

The Crowley-Nordström ν -Invariant

17.35 - 18.30

Anda Degeratu (Freiburg)

Analysis on QAC spaces (quasi asymptotically conical spaces)

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Analysis and Topology in interaction

Program for Friday June 20

9.00 - 9.55

Edward Bierstone (Toronto)

Hsiang-Pati coordinates

10.05 - 11.00

Ulrich Bunke (Regensburg)

Regulators and an Index Theorem

11.00 - 11.30 Coffee break

11.35 - 12.30

Chris Kottke (Northeastern University)

Fusive loop-spin and string structures

12.45 Lunch

14.00- 14.55

Ursula Ludwig (Paris Orsay)

The Witten deformation for singular spaces and radial Morse functions

15.00 - 15.55

Frederic Rochon (Montreal)

The moduli space of asymptotically cylindrical Calabi-Yau manifolds

16.00 - 16.30 Coffee