

Representation Theory XII
IUC, Dubrovnik, Croatia, June 19 – 26, 2011

Schedule

Monday, June 20

9:00 – 9:50 **David Vogan** Finite maximal tori

10:00 – 10:50 **Nigel Higson** Lie group representations and the Baum–Connes conjecture

Chair: Hrvoje Kraljević

10:50 – 11:10 Coffee break

11:10 – 12:00 **Paul Baum** Geometric structure in the representation theory of reductive p -adic groups

12:10 – 13:00 **Jing–Song Huang** Dirac cohomology of highest weight modules

Chair: Pavle Pandžić

Tuesday, June 21

9:00 – 9:50 **Peter Fiebig** On representations of affine Kac–Moody algebras at the critical level I

10:00 – 10:50 **Adriano Moura** Characters and extensions of finite-dimensional representations of classical and quantum affine algebras

Chair: Dijana Jakelić

10:50 – 11:10 Coffee break

11:10 – 12:00 **Paul Baum** Morita equivalence revisited

12:10 – 13:00 **Dražen Adamović** On the structure of Zhu's algebras for certain W -algebras

Chair: Adriano Moura

16:00 – 16:50 **Tomislav Šikić** The generating condition for the extension of the classical Gauss series–product identity

16:50 – 17:10 Coffee break

17:10 – 18:00 **Gordan Radobolja** Some representations over Virasoro algebra with infinite–dimensional weight spaces

Chair: Punita Batra

Wednesday, June 22

9:00 – 9:50 **Salah Mehdi** Harmonic spinors, Dirac cohomology and representation theory

10:00 – 10:50 **Toshiyuki Kobayashi** Restrictions of Verma modules to symmetric pairs and some applications to differential geometry I

Chair: David Vogan

10:50 – 11:10 Coffee break

11:10 – 12:00 **Dijana Jakelić** The q -characters and blocks at roots of unity

12:10 – 13:00 **Punita Batra** Highest weight modules over pre-exp-polynomial Lie algebras

Chair: Dražen Adamović

Thursday, June 23

9:00 – 9:50 **Dragan Miličić** Geometry and unitarity

10:00 – 10:50 **Toshiyuki Kobayashi** Restrictions of Verma modules to symmetric pairs and some applications to differential geometry II

Chair: Boris Širola

10:50 – 11:10 Coffee break

11:10 – 12:00 **Kyo Nishiyama** Finiteness of orbits on double flag varieties for symmetric pairs

12:10 – 13:00 **Pavle Pandžić** Dirac cohomology of some unipotent representations

Chair: Toshiyuki Kobayashi

16:00 – 16:50 **Lucas Fresse** On B -orbit decompositions of orbital varieties

16:50 – 17:10 Coffee break

17:10 – 18:00 **Boris Širola** Pairs of Lie algebras: On self-normalizing subalgebras, Cartan subalgebras and compatible pairs of Borel subalgebras

Chair: Kyo Nishiyama

Friday, June 24

9:00 – 9:50 **Peter Fiebig** On representations of affine Kac–Moody algebras at the critical level II

10:00 – 10:50 **Ozren Perše** Conformal embeddings of affine vertex operator algebras

Chair: Mirko Primc

10:50 – 11:10 Coffee break

11:10 – 12:00 **Michel Duflo** Frobenius Lie subalgebras of simple Lie algebras

12:10 – 13:00 **Susana Salamanca–Riba** Omega regular unitary representations

Chair: Dragan Miličić

Saturday, June 25

9:00 – 9:50 **Goran Trupčević** Combinatorial bases of principal subspaces for affine Lie algebras

10:00 – 10:50 **Antun Milas** Screening operators and vertex algebras

10:50 – 11:10 Coffee break

11:10 – 12:00 **Miroslav Jerković** Quasi–particle fermionic formulas for $(k,2)$ –admissible configurations

Chair: Ozren Perše