Mathematical Society of Japan - 10th International Research Institute

Representation Theory of
Algebraic Groups and Quantum Groups

DATE: August 1 – 10, 2001
PLACE: Sophia University, Tokyo, Japan

PROGRAM

August 1 (Wednesday)

13:45 – 14:45 **T. Tanisaki**
Highest weight modules over affine Lie algebras
15:00 – 16:00 **K. Saito**
Elliptic Lie groups
16:30 – 17:30 **S. -J. Kang**
Quantum groups and crystal bases

August 2 (Thursday)

10:00 – 11:00 **S. -J. Kang**
Perfect crystals and Young walls
11:15 - 12:15 **A. Zelevinsky**
An introduction to cluster algebras
13:45 - 14:45 **M. Broué**
Families of characters of cyclotomic Hecke algebras
15:00 - 16:00 **N. Xi**
A property of distinguished involutions in an affine Weyl
group of type $\tilde{A}_n$
16:30 - 17:30 **S. Ariki**
The representation type of Hecke algebras of type B

August 3 (Friday)

10:00 - 11:00 **S. -J. Kang**
Fock space representation of quantum affine algebras
11:15 - 12:15 **H. Nakajima**
Quiver varieties and quantum affine algebras, I
13:45 - 14:45 **M. Kashiwara**
On semisimple holonomic module conjecture

15:00 - 16:00   **A. Kleshchev**
Projective representations of symmetric groups via Kac-Moody
algebras
16:30 - 17:30   **S. Naito**
Twining character formula for Demazure modules

August 4 (Saturday)

10:00 - 11:00   **H. Nakajima**
Quiver varieties and quantum affine algebras, II
11:15 - 12:15   **G. Lusztig**
Representations of graded Hecke algebras, I

August 6 (Monday)

10:00 - 11:00   **G. Lusztig**
Representations of graded Hecke algebras, II
11:15 - 12:15   **H. Nakajima**
Quiver varieties and quantum affine algebras, III
13:45 - 14:45   **E. Vasserot**
D-modules, formal loop spaces and chiral algebras
15:00 - 16:00   **V. Ostrik**
Asymptotic Hecke algebra and central sheaves
16:30 - 17:30   **A. Gyoja**
Prehomogeneous vector spaces and representations

August 7 (Tuesday)

10:00 - 11:00   **O. Mathieu**
Connections on stable bundles, I
11:15 - 12:15   **G. Lusztig**
Representations of graded Hecke algebras, III
13:45 - 14:45   **H.H. Andersen**
Small cells and fusion rules
15:00 - 16:00   **S. Arkhipov**
Algebraic construction of quasi-Verma modules in positive
characteristic
16:30 - 17:30   **M. Kaneda**
On the Beilinson-Bernstein correspondence on the flag variety
in positive characteristic

August 8 (Wednesday)

10:00 - 11:00   **J.C. Jantzen**
Representations of Lie algebras in prime characteristics, I
11:15 - 12:15   **O. Mathieu**
Connections on stable bundles, II
13:45 - 14:45   **A. Kirillov**
Birational representations of symmetric groups, combinatorics and discrete integrable equations
15:00 - 16:00   **A. Mathas**
Tilting modules for cyclotomic Schur algebras
16:30 - 17:30   **T.A. Springer**
Intersection cohomology of large Schubert varieties

August 9 (Thursday)

10:00 - 11:00   **O. Mathieu**
Connections on stable bundles, III
11:15 - 12:15   **J.C. Jantzen**
Representations of Lie algebras in prime characteristics, II
13:45 - 14:45   **R. Bezrukavnikov**
Localization type Theorems for modular representations and representations of quantum groups at a root of unity
15:00 - 16:00   **M. Noumi**
Birational Weyl group actions, discrete integrable systems and tropical combinatorics
16:30 - 17:30   **C.W. Curtis**
On the Gelfand-Graev representations of finite reductive groups: Zeta functions and functional equations

August 10 (Friday)

10:00 - 11:00   **J.C. Jantzen**
Representations of Lie algebras in prime characteristics, III
11:15 - 12:15   **G.I. Lehrer**
Cell modules and standard modules for the affine Hecke algebra of type A
13:45 - 14:45   **N. Kawanaka**
Sato-Welter games and Weyl groups of Kac-Moody Lie algebras
15:00 - 16:00   **T. Shoji**
Green functions associated to complex reflection groups