

# Representation Theory of Chevalley Groups and Related Topics

The conference in honor of Toshiaki Shoji on the occasion  
of his retirement from Nagoya University.

**Date:** March 12th (Mon) – 16th (Fri), 2012

**Place:** Room 509 - Science Building 1,  
Graduate School of Mathematics, Nagoya University

<http://www.math.nagoya-u.ac.jp/~miyachi/shoji/>

## Program

March 12th (Mon)

13:45 - 14:45 Soichi Okada ( Nagoya University )  
Spinor representations and symmetric functions

15:00 - 16:00 Kentaro Wada ( Shinshu University )  
Drinfeld type realization of cyclotomic  $q$ -Schur algebras

16:30 - 17:30 Ken-ichi Shinoda ( Sophia University )  
Gauss sums on finite groups and Hecke algebras

March 13th (Tue)

10:00 - 11:00 Karine Sorlin ( Universit'e de Picardie Jules Verne )  
Modular Springer Correspondence for classical types

11:15 - 12:15 Frank Lübeck (RWTH Aachen)  
On problems with computing character values of finite groups of Lie type

13:45 - 14:45 George Lusztig (MIT)  
A bar operator for involutions in a Coxeter group

15:00 - 16:00 Meinolf Geck (University of Aberdeen)  
Kazhdan-Lusztig cells and the Frobenius-Schur indicator

16:30 - 17:30 Jean Michel (Paris VII)  
Parabolic Deligne-Lusztig varieties

March 14th (Wed)

10:00 - 11:00 Syu Kato ( Kyoto University )  
A homological study of Green polynomials

13:00 - 14:00 Toshiaki Shoji ( Nagoya University )  
Characters, character sheaves and beyond (Final Lecture)

March 15th (Thu)

10:00 - 11:00 John Enyang (University of Sydney)  
Cellular bases for algebras with a Jones basic construction

11:15 - 12:15 Osamu Iyama (Nagoya University)  
Pseudo-tilting theory

13:45 - 14:45 Cédric Bonnafé (Université Montpellier II)  
Calogero-Moser cells: the smooth case

15:00 - 16:00 Tomoyuki Arakawa (RIMS)  
Kac-Wakimoto admissible representations

16:30 - 17:30 Toshiyuki Tanisaki (Osaka City University)  
TBA

March 16th (Fri)

10:00 - 11:00 Tomoki Nakanishi (Nagoya University)  
Classical and quantum dilogarithm identities

11:15 - 12:15 Hiroyuki Ochiai (Kyushu University)  
Double flag variety for a symmetric pair and finiteness of orbits

13:45 - 14:45 Masaharu Kaneda (Osaka City University)  
On the structure of parabolically induced  $G_1T$ -Verma modules

15:00 - 16:00 Gus I. Lehrer (University of Sydney)  
The Brauer category and second fundamental theorem of invariant theory

16:30 - 17:30 Noriaki Kawanaka (Kwansei Gakuin University)  
Algorithms and games with hook structure

Organizers: T. Arakawa (RIMS), J. Enyang (Sydney), H. Miyachi (Nagoya),  
N. Sawada (Sophia), K. Sorlin (Amiens), K. Wada (Shinshu)