

研究集会「リー群の表現論」

不変微分作用素, 指標, Orbit Method をめぐって

Representation Theory of Lie Groups

— In honor of Professor Takeshi HIRAI —

Dates: February 18 (Monday) – February 22 (Friday), 2002

Location: Research Institute for Mathematical Sciences (Room 420)
Kyoto University, Sakyo, Kyoto 606-8502, Japan

Organizers: K. Nishiyama, H. Yamashita, M. Kashiwara

Program:

time	Feb.18(Mon)	Feb.19(Tue)	Feb.20(Wed)	Feb.21(Thu)	Feb.22(Fri)
9:30 – 10:30	Fujiwara	Takase	Ochiai (9:20–10:20)	Brion	Nishiyama
10:45 – 11:45	Nomura	Schiffmann	Kato (10:30–11:30)	Kawanaka	Knop
	lunch	lunch	Uzawa (11:45–12:45)	lunch	lunch
13:30 – 14:30	Itoh	Torasso	No lecture	Ohta	Yamashita
14:45 – 15:45	Oshima	Aoki-Kato	No lecture	Sekiguchi	Loke
16:00 – 17:00	Duflo	Hirai	No lecture	Levasseur	Matumoto
		<i>Banquet</i> (18:00 –)			

February 18 (Mon)

- 9:25 – 9:30 Opening ceremony
- 9:30 – 10:30 Hidenori Fujiwara (Kinki University)
“Analysis on nilpotent homogeneous spaces; reciprocity and differential operators”
- 10:45 – 11:45 Takaaki Nomura (Kyoto University)
“Symmetry characterizations for homogeneous Siegel domains related to Laplace-Beltrami operators ”
- 13:30 – 14:30 Minoru Itoh (Kyoto University)
“Capelli identities for the dual pair (O_M, Sp_N) ”
- 14:45 – 15:45 Toshio Oshima (University of Tokyo)
“A quantization of coadjoint orbits and differential equations attached to generalized flag manifolds”
- 16:00 – 17:00 Michel Duflo (Université Paris VII)
“On Poincaré-Birkhoff-Witt theorem and CDYBE equation”

February 19 (Tue)

- 9:30 – 10:30 Kouichi Takase (Miyagi University of Education)
“On Fourier transform of spherical trace function”
- 10:45 – 11:45 Gérard Schiffmann (Université de Strasbourg, Professor emeritus)
“Invariant distributions, involutions and multiplicity one theorems”
- 13:30 – 14:30 Pierre Torasso (Université de Poitiers)
“The character formula for almost algebraic groups”
- 14:45 – 15:45 Shigeru Aoki (Takushoku Univ.) and Suehiro Kato (Kitasato Univ.)
“Matching conditions for invariant eigendistributions on semisimple symmetric spaces ”
- 16:00 – 17:00 Takeshi Hirai (Kyoto University, Professor emeritus)
“On unitary representations of infinite classical Weyl groups”
- 18:00 – Banquet (Conference dinner) at Kyôdai-kaikan

February 20 (Wed)

- 9:20 – 10:20 Hiroyuki Ochiai (Tokyo Institute of Technology)
“Eigenspace representations of symmetric spaces of exceptional type”
- 10:30 – 11:30 Syu Kato (University of Tokyo)
“On the higher cohomology group of group completion”
- 11:45 – 12:45 Tohru Uzawa (Rikkyo University)
“Symmetric varieties”

February 21 (Thu)

- 9:30 – 10:30 Michel Brion (Université Joseph Fourier)
“A geometric approach to standard monomial theory”
- 10:45 – 11:45 Noriaki Kawanaka (Osaka University)
“Sato-Welter game and its generalizations
— 2-person games for representation theorists”
- 13:30 – 14:30 Takuya Ohta (Tokyo Denki University)
“Nilpotent orbits of \mathbb{Z}_4 -graded Lie algebra and geometry of
moment maps associated to the dual pair $(U(p, q), U(r, s))$,
 $(O(p, q), Sp(2n, \mathbb{R}))$ and $(Sp(p, q), O^*(2n))$ ”
- 14:45 – 15:45 Jiro Sekiguchi (Tokyo University of Agriculture and Technology)
“Recent progress on nilpotent orbits of complex symmetric pairs”
- 16:00 – 17:00 Thierry Levasseur (Université de Brest)
“Differential operators on highest weight varieties”

February 22 (Fri)

- 9:30 – 10:30 Kyo Nishiyama (Kyoto University)
“Theta lifting of nilpotent orbits and multiplicity-free action”
- 10:45 – 11:45 Friedrich Knop (Rutgers University)
“Harmonic analysis on multiplicity free spaces”
- 13:30 – 14:30 Hiroshi Yamashita (Hokkaido University)
“Isotropy representation attached to Harish-Chandra module
with irreducible associated variety”
- 14:45 – 15:45 Hung-Yean Loke (National University of Singapore/ Kyoto Univ.)
“Howe quotients of unitary lowest weight modules”
- 16:00 – 17:00 Hisayosi Matumoto (University of Tokyo)
“On the socle of degenerate principal series representation of $U(m, n)$ ”

The latest information will be found in the conference web-page

<http://w3rep.math.h.kyoto-u.ac.jp/meeting/wshirai2002.html>

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