

Representation Theory, Systems of Differential Equations and their Related Topics

Dates: 2 - 6 July 2007

Venue: 4-508, Department of Mathematics, Hokkaido University
(on the 5th floor of Science Bldg #4)

URL: <http://coe.math.sci.hokudai.ac.jp/sympo/070702/>

Organizers: Keiji Matsumoto (Hokkaido University)
Hiroyuki Ochiai (Nagoya University)
Toshio Oshima (University of Tokyo)
Mutsumi Saito (Hokkaido University)
Hiroaki Terao (Hokkaido University)
Hiroshi Yamashita (Hokkaido University)

Program:

Monday, July 2

- 13:30-14:30 Toshio Oshima (University of Tokyo)
Heckman-Opdam hypergeometric functions and their confluences
- 15:00-16:00 Taku Ishii (Chiba Institute of Technology)
Explicit formulas of Whittaker functions on real semisimple Lie groups
- 16:15-17:15 Birne Binengar (Oklahoma State University)
Whittaker vectors, generalized hypergeometric functions and a matrix calculus

Tuesday, July 3

- 9:30-10:30 Nobuki Takayama (Kobe University)
Modified A -hypergeometric system
- 10:45-11:45 Uli Walther (Purdue University)
Regularity and slopes of hypergeometric systems along linear subspaces
- 13:30-14:30 Hironobu Kimura (Kumamoto University)
The general Schlesinger system and Ward correspondence
- 15:00-16:00 Yoshishige Haraoka (Kumamoto University)
Studies on regular holonomic systems from the viewpoint of rigidity
- 16:15-17:15 Jiro Sekiguchi (Tokyo University of Agriculture and Technology)
Singular curves, Saito free divisors and root systems
- 18:00-20:00 Reception at Enreiso

Wednesday, July 4

- 9:00-10:00 Gen Mano (University of Tokyo)
The unitary inversion operator for the minimal representation of the indefinite orthogonal group $O(p, q)$
- 10:15-11:15 Tomohide Terasoma (University of Tokyo)
Beilinson regulator and bar complex for Deligne cohomology
- 11:30-12:30 Ken-ichi Sugiyama (Chiba University)
A geometric analog of the Iwasawa conjecture

Thursday, July 5

- 9:30-10:30 Yutaka Matsui (University of Tokyo)
Lefschetz fixed point formulas over singular varieties
(a joint work with K. Takeuchi)
- 10:45-11:45 Ryohei Hattori (Hokkaido University)
On periods of cyclic triple coverings of the complex projective line and theta constants
- 13:30-14:30 William Traves (United States Naval Academy)
Differential operators and invariant theory
- 15:00-16:00 Kazufumi Kimoto (University of the Ryukyus)
Invariant theory of singular α -determinants
- 16:15-17:15 Minoru Itoh (Kagoshima University)
Schur type functions associated to polynomial sequences of binomial type

Friday, July 6

- 9:00-10:00 Salem Ben Said (Université Henri Poincaré)
On the role of $SL(2, \mathbf{R})$ in the theory of Dunkl operators
- 10:15-11:15 Atsushi Wakamiko (Hokkaido University)
On the freeness of multi-Coxeter arrangements of type B_ℓ and F_4
- 11:30-12:30 Jing-Song Huang (Hong-Kong University of Science and Technology)
Dirac operators and Lie algebra cohomology

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