18th Autumn Workshop on Number Theory

“Geometrical Applications of Modular Forms of Several Variables”

6th – 10th November 2015
at Hakuba High Mount Hotel (Hakuba, Nagano, JAPAN)

Organizers
Hiroki Aoki (Tokyo Univ. of Science)
Shuichi Hayashida (Joetsu Univ. of Education)
Hiroshi Sakata (Waseda Univ. Senior High School)

Program

6th Nov. (Fri.)
– 16:30 Reception
16:30 – 18:30 Atsuhira Nagano (Waseda Univ.)
Modular functions coming from elliptic curves and K3 surfaces
19:00 – Dinner

7th Nov. (Sat.)
9:30 – 11:30 Ken-Ichi Yoshikawa (Kyoto Univ.)
Analytic torsion for K3 surfaces with involution
12:00 – Lunch
14:00 – 15:30 Atsuhira Nagano (Waseda Univ.)
Hilbert modular functions via K3 surfaces and applications in algebraic number theory
16:00 – 18:00 Hironori Shiga (Chiba Univ.)
Period map, Picard modular forms and Complex multiplication of higher degree
18:10 – 18:20 About next workshop
(mainly for Japanese participants)
18:30 – Dinner (Party)
8th Nov. (Sun.)
9:30 – 11:00 Shigeyuki Kondo (Nagoya Univ.)
An application of Borcherds products
11:30 – Lunch
11:30 – Lunch
18:30 – Dinner

9th Nov. (Mon.)
9:30 – 11:30 Shouhei Ma (Tokyo Institute of Technology)
Birational type of orthogonal modular varieties
12:00 – Lunch
14:00 – 15:00 Nils-Peter Skoruppa (Univ. of Siegen)
New results on Weil representations of $\text{SL}_2$ over Dedekind domains and applications
15:30 – 16:30 Winfried Kohnen (Univ. of Heidelberg)
Characterization of Siegel cusp forms by means of the growth of their Fourier coefficients
17:00 – 18:00 Siegfried Böcherer (Univ. of Mannheim)
On denominators of twisted values of standard $L$-functions
18:30 – Dinner
20:30 – 21:30 Bernhard Heim (GUtech)
The Jacobi triple identity, divisors and symmetries

10th Nov. (Tue.)
9:30 – 11:00 Kyoji Saito (IPMU)
Automorphic forms associated with a period map of primitive forms
11:15 – Lunch