

TSUDA COLLEGE AND OIST JOINT WORKSHOP ON
CALABI–YAU VARIETIES: ARITHMETIC, GEOMETRY AND PHYSICS

AUGUST 1–3, 2016

August 1–2 at Tsuda College Room 7406 and 7407

August 3 at Tokyo University Komaba Campus Room 117

Organized by K. Matsuno (Tsuda College), T. Oda (OIST), N. Yui (Queen’s University)

PROGRAM

AUGUST 1, 2016

- 9:30am–10:30am **Terasoma, Tomohide** (University of Tokyo)
Periods of certain open Fermat hypersurfaces
- 10:30am–11:30am **Hashimoto, Kenji** (University of Tokyo)
Some examples of symplectic automorphisms of K3 surfaces with infinite order
- 11:30am–12:30pm **Carnahan, Scott** (University of Tsukuba)
Rationality of orbifold CFTs and Generalized Moonshine
- 12:30pm–2:00pm **Lunch**
- 2:00pm–3:00pm **Tokunaga, Hiroo** (Tokyo Metropolitan University)
On the topology of reducible plane curves
- 3:00pm–4:00pm **Tumenbayar, Khulan** (Tokyo Metropolitan University)
Geometry of weak contact conics to irreducible quartics with 2 nodes and 1 cusp via rational elliptic surfaces and Zariski pairs
- 4:00pm–5:00pm **Ito, Hiroyuki** (Tokyo University of Science, Noda)
Wild group scheme quotient singularities
- 5:30pm **Informal Workshop Dinner**

AUGUST 2, 2016

- 9:30am–10:30am **Katsura, Toshiyuki** (Hosei University)
Enriques surfaces with finite automorphism groups in characteristic 2
- 10:30am–11:30am **Shepherd–Barron, Nick** (Kings College London)
The stable Schottky problem for some special loci of curves
- 11:30am–12:30pm **Hosono, Shinobu** (Gakushuin University)
Looking geometry from the moduli spaces of CICYs II
- 12:30pm–2:00pm **Lunch**
- 2:00pm–3:00pm **Kanazawa, Atushi** (Harvard University)
Geometric transitions and SYZ mirror symmetry
- 3:00pm–4:00pm **Ohashi, Hisanori** (Tokyo University of Science, Noda)
On some families of Enriques surfaces parametrized by rational modular curves
- 4:00pm–5:00pm **Yui, Noriko** (Queen’s University)
Automorphy of Calabi–Yau varieties of CM type
- 5:30pm **Workshop Dinner**

AUGUST 3, 2016

9:30am–10:30am **Kuwata, Masato** (Chuo University)

Elliptic normal curves of degree $2N$ and modular groups

10:30am–11:30am **Wakatsuki, Satoshi** (Kanazawa University)

The dimensions of spaces of Siegel cusp forms of general degree

11:30am–12:30pm **Hikami, Shinobu** (OIST)

Intersection numbers of the moduli space of p -spin curves from matrix models

12:30pm–2:00pm **Lunch**

2:00pm–3:00pm **Sano, Taro** (Kobe University)

Deformations of cones over $K3$ surfaces

3:00pm–4:00pm **Oda, Takayuki** (OIST)

Cohomological representations of $SO(2, q)$ in quantum field theory and in the theory of automorphic forms

5:00pm **Informal Workshop Dinner**

NB: Each lecture is for 50minutes followed by questions. The lecture hall is equipped with white boards as well as electronic equipments (e.g., document camera, OHP, beamer presentation)