

ARITHMETIC AND GEOMETRY OF ALGEBRAIC VARIETIES
WITH SPECIAL EMPHASIS ON
CALABI-YAU VARIETIES AND MIRROR SYMMETRY

MARCH 7–8, 2009

The Fields Institute, 222 College Street, Toronto

Organized by James D. Lewis (Alberta) and Noriko Yui (Queen's)

MARCH 7, 2009

- 9:30am **Steven Lu**, UQAM
Picard theorems for holomorphic curves in varieties with maximal Albanese dimension and the resolution of a conjecture of Lang
- 10:30am **Ling Long**, Iowa State University
Modularity of Galois representations attached to an elliptic modular surface
- 11:30am **Bill Hoffman**, Louisiana State University
Infinitesimal structure of Chow groups
- 12:30pm–2:00pm **Lunch**
- 2:00pm **David Ploog**, University of Toronto
Understanding derived categories of sheaves on singular projective varieties
- 3:00pm **Doug Haessig**, University of Rochester
Mirror symmetry and quotients of zeta functions
- 4:00pm **Sheldon Joyner**, University of Western Ontario
Zeta functions as iterated integrals
- 5:00pm **Noriko Yui**, Queen's University
Certain $K3$ surfaces with non-symplectic group actions and their modularity
- 7:00m **Workshop Dinner**

MARCH 8, 2009

- 9:30am **Yasuhiro Goto**, Hokkaido University of Education
On the L-series of some Calabi-Yau threefolds over the rationals
- 10:30am **Gregory Pearlstein**, Michigan State University
The zero locus of an admissible normal function
- 11:30am **James Lewis**, University of Alberta
An Archimedean height pairing on the equivalence relation defining Bloch's higher Chow groups
- 12:30pm **Ying Zong**, University of Toronto
CM-liftings of abelian varieties
- Afternoon **Discussions**