

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

OCTOBER 31–NOVEMBER 1, 2009

The Fields Institute, 222 College Street, Toronto

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

OCTOBER 31, 2009

- 9:30am **Chris Brav**, University of Toronto
Braid groups and Kleinian singularities
- 10:30am **David Ploog**, University of Toronto
Comparing Coxeter functors
- 11:30am **Matt Szczesny**, Boston University
Feynman graphs, Hecke correspondences, and quasisymmetric functions
- 12:30pm–2:00pm **Lunch**
- 2:00pm **Valdemar Tsanov**, Queen's University
Pullbacks in equivariant cohomology of flag varieties
- 3:00pm **Ursula Whitcher**, Harvey Mudd College
Mirror Manifolds and Discrete Symmetry Groups
- 4:00pm **Xi Chen**, University of Alberta
Self rational maps of K3 surfaces
- 5:00pm **Noriko Yui**, Queen's University
On the modularity of certain quotients of $K3 \times E$
- 6:30m **Workshop Dinner**

NOVEMBER 1, 2009

- 9:30am **Steven Lu**, UQAM
Positivity of the canonical bundle of a hyperbolic manifold
- 10:30am **Vincent Bouchard**, University of Alberta
Topological recursion and Hurwitz numbers
- 11:30 **James Lewis**, University of Alberta
(Co-)Homological Models for Higher Chow Groups
- 12:30pm **Karol Palka**, McGill University/CIRGET
On the classification of singular \mathbb{Q} -acyclic surfaces
- Afternoon **Discussions**