ARITHMETIC AND GEOMETRY OF ALGEBRAIC VARIETIES
WITH SPECIAL EMPHASIS ON
CALABI–YAU VARIETIES AND MIRROR SYMMETRY
MARCH 7–8, 2015

The Fields Institute, Room 230, 222 College Street, Toronto

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

MARCH 7, 2015

10:00am   **Thompson, Alan** (University of Waterloo)
Towards a compactification of the moduli space of K3 surfaces of degree two

11:00am   **Harder, Andrew** (University of Alberta)
The geometry of Landau–Ginzburg models

12:00pm–2:00pm   **Lunch**

2:00pm   **Molnar, Alex** (Queen's University)
Arithmetic with generalized Borcea-type Calabi–Yau threefolds

3:30pm   **Sala, Francesco** (Western University)
Sheaves on root toric stacks and cyclic quiver varieties

4:30pm   **Yui, Noriko** (Queen's University)
Update on automorphy of Calabi–Yau threefolds

6:00pm   **Workshop Dinner**

MARCH 8, 2015

10:00am   **Barron, Tatyana** (Western University)
Quantization on hyperkähler and multisymplectic manifolds

11:00am   **Perunicic, Andrija** (Queen's University)
Counting points via Frobenius on twisted D-modules

12:00 noon   **Lewis, James** (University of Alberta)
Nodal rational curves and a going-up theorem for K-theory induced normal functions

Afternoon **Informal Discussions**