

ARITHMETIC AND GEOMETRY OF HIGHER DIMENSIONAL VARIETIES

WITH SPECIAL EMPHASIS ON

CALABI–YAU VARIETIES AND MIRROR SYMMETRY

MARCH 5–6, 2005

The Fields Institute, 222 College Street, Toronto

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

PROGRAM

MARCH 5, 2005

- 10:00am **Victor Batyrev**, University of Tübingen/The Fields Institute
Phases in local toric mirror symmetry
- 11:15am **Paul Horja**, The Fields Institute
Birational geometry of toric stacks and monodromy
- 12:15pm–2:00pm **Lunch**
- 2:00pm **Roya Beheshti–Zavareh**, Queen's University
Lines on projective hypersurfaces
- 3:30pm **Edward Lee**, Harvard University
**A modular nonrigid Calabi–Yau threefolds arising from the
Horrocks–Mumford vector bundle**
- 4:45pm **Yuri Zarhin**, Pennsylvania State University
Endomorphism algebras of superelliptic Jacobians
- 6:30pm **Workshop Dinner at EMATEI, 30 St Patrick, Toronto: Tel 416–340–0472**

MARCH 6, 2005

- 9:30am **Ling Long**, Iowa State University
Picard–Fuchs equations of certain one-parameter families of K3 surfaces
- 10:40am **Ruxandra Moraru**, The Fields Institute
Moduli spaces of stable bundles on certain non-Kähler surfaces
- 11:50am **Klaus Hulek**, University of Hannover/The Fields Institute
Modularity of nonrigid Calabi–Yau varieties
- Afternoon **Discussions**