ARITHMETIC AND GEOMETRY OF ALGEBRAIC VARIETIES
WITH SPECIAL EMPHASIS ON
CALABI–YAU VARIETIES AND MIRROR SYMMETRY
NOVEMBER 5–6, 2005

The Fields Institute, 222 College Street, Toronto

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

NOVEMBER 5, 2005

9:30am **Roy Joshua**, Ohio State University
Kunneth and motivic decomposition for quotient varieties

10:30am **Ronald van Luijk**, CRM Montreal and MSRI Berkeley
Quartic K3 surfaces with trivial automorphism group

11:30am **Matt Papanikolas**, Texas A& M University
Hypergeometric functions over finite fields and counting points on varieties

12:30pm–2:30pm **Lunch**

2:30pm **Helena Verrill**, Louisiana State University
Toric modular Calabi–Yau threefolds

3:30pm **Nam-Hoon Lee**, University of Michigan
New examples of Calabi–Yau threefolds with Picard number one

4:30pm **John Scherk**, University of Toronto
Borel–Serre compactifications of classifying spaces of Hodge structures

6:30pm **Workshop Dinner**

NOVEMBER 6, 2005

9:30am **Andreas Rosenschon**, State University of New York at Bullafo
A Lefschetz $(1,1)$-theorem for proper seminormal complex varieties

10:30am **Michela Artebani**, University of Milano and Queen's University
A moduli space of genus three curves and K3 surfaces

11:30am **Noriko Yui**, Queen's University
Motives and Mirror Symmetry

Afternoon **Discussions**