

THE BIRS FIVE DAY WORKSHOP
CALABI-YAU VARIETIES AND MIRROR SYMMETRY
DECEMBER 6-11, 2003
WORKSHOP SCHEDULE

DECEMBER 6, 2003

Arrival

DECEMBER 7, 2003

9:00am-9:15am **Robert Moody**, Director of BIRS
Director's welcoming address

9:15am-10:15am **Jim Bryan**, University of British Columbia
Topological Quantum Field Theory and the Gromov-Witten Theory of Curves in Calabi-Yau Threefolds

10:15am-10:45am **Coffee Break**

10:45am-11:45am **Albrecht Klemm**, University of Wisconsin, Physics
The Topological Vertex

12:00-2:00pm **Lunch**

2:00-3:00pm **Xi Chen and James D. Lewis**, University of Alberta
Hodge D -Conjecture for $K3$ and Abelian Surfaces

3:00pm-3:30pm **Coffee Break**

3:30pm-4:30pm **Chuck Doran**, Columbia University
Integral Structures, Toric Geometry, and Homological Mirror Symmetry

4:45pm-5:45pm **Andrey Todorov**, University of California Santa Cruz
Higher Dimensional Analogues of Dedekind Eta Function

6:00pm **Dinner**

8:00pm **Welcoming Party**

DECEMBER 8, 2003

- 9:15am–10:15am **Brian Forbes**, University of California Los Angeles
Open String Mirror Maps from Picard–Fuchs Equations on Relative Cohomology
- 10:15am–10:45am **Coffee Break**
- 10:45am–11:45am **Eckart Viehweg and Kang Zuo**, University of Essen
Complex Multiplication, Griffiths–Yukawa Couplings, and Rigidity for Families of Hypersurfaces
- 11:45am–2:00pm **Lunch**
- 2:00pm–3:00pm **Yi Zhang**, Zhejiang University, China
Some Results on Families of Calabi–Yau Manifolds
- 3:00pm–3:30pm **Coffee Break**
- 3:30pm–4:30pm **Rolf Schmmrigk**, Kennesaw State University
Complex Multiplication of Calabi–Yau Varieties and String Theory
- 4:45pm–5:45pm **Wei-Dong Ruan**, University of Wisconsin
Generalized Special Lagrangian Torus Fibration for Calabi–Yau Manifolds
- 6:00pm **Dinner**
- 8:00pm–9:00pm **Kentaro Hori**, Physics, University of Toronto
Calabi–Yau Orientifolds

DECEMBER 9, 2003

- 9:15am–10:15am **Matt Kerr**, University of California Los Angeles
Constructing Nontrivial Cycles on Abelian and Calabi–Yau Varieties
- 10:15am–10:45am **Coffee Break**
- 10:45am–11:45am **Shi-shyr Roan**, Academia Sinica, Taipei, Taiwan
Rational Curves in Rigid Calabi–Yau Threefolds
- 12:00noon **Lunch**

Free Afternoon

- 6:00pm **Dinner**
- 8:00pm **Informal Discussions**

DECEMBER 10, 2003

9:15am–11:15am **Balazs Szendroi**, University of Utrecht
Calabi–Yau Threefolds in Weighted Homogeneous Varieties

10:15am–10:45am **Coffee break**

10:45am–11:45am **Shinobu Hosono**, University of Tokyo
GKZ Hypergeometric Series, Mirror Symmetry, and Singularity Theory

11:45am–2:00pm **Lunch**

2:00pm–3:00pm **Marie José Bertin**, Université Pierre et Marie Curie (Paris 6)
Mahler’s Measure and L-Series of K3 Hypersurfaces

3:00pm–3:30pm **Coffee break**

3:30pm–4:30pm **Klaus Hulek and Helena Verrill**, University of Hannover, and Louisiana State University
Examples of Non-Rigid Modular Calabi–Yau Manifolds

4:45pm–5:45pm **Kenichiro Kimura**, University of Tsukuba
 K_1 of a Self-Product of a Curve

6:00pm **Dinner**

8:00pm **Informal Discussions**

DECEMBER 11, 2003

9:15am–10:15am **Keiji Oguiso**, University of Tokyo
Simple Groups, Solvable Groups and K3 Surfaces

10:15am–10:45am **Coffee break**

10:45am–11:45am **John McKay**, Concordia University
TBA or Three Sporadic Groups and Affine Lie Data

12:00 noon **Lunch**

Afternoon **Departure**