

Banff International Research Station

for Mathematical Innovation and Discovery

BIRS 11w5090: Hodge Theory and String Duality 4-9 December 2011

MEALS

*Breakfast (Buffet): 7:00 – 9:30 am, Sally Borden Building, Monday – Friday

*Lunch (Buffet): 11:30 am – 1:30 pm, Sally Borden Building, Monday – Friday

*Dinner (Buffet): 5:30 - 7:30 pm, Sally Borden Building, Sunday - Thursday

Coffee Breaks: As per daily schedule, in the foyer of the TransCanada Pipeline Pavilion (TCPL)

*Please remember to scan your meal card at the host/hostess station in the dining room for each meal.

MEETING ROOMS

All lectures will be held in the new lecture theater in the TransCanada Pipelines Pavilion (TCPL). LCD projector, overhead projectors and blackboards are available for presentations.

SCHEDULE

Sunday

16:00	Check-in begins (Front Desk – Professional Development Centre - open 24 hours)

Lecture rooms available after 16:00

17:30-19:30 Buffet Dinner

20:00 Informal gathering in 2nd floor lounge, Corbett Hall

Beverages and small assortment of snacks are available on a cash honor system.

Monday

7:00-8:45 Breakfast

8:45-9:00 Introduction and Welcome by BIRS Station Manager, TCPL

9:00-10:00 Dave Morrison (UCSB), "Hodge theory and string compactification"

10:00-10:30 Coffee Break, TCPL

10:30-11:30 Matthew Ballard (University of Wisconsin), "Some new cases of the Hodge conjecture

via graded matrix factorizations"

11:30 Group Photo; meet on the front steps of Corbett Hall

11:30-13:30 Lunch

13:30-14:30 Greg Pearlstein (Michigan State), "Nilpotent orbits and Nahm's equations"

14:30-15:30 Coffee Break, TCPL

17:30-19:30 Dinner

Tuesday

7:00-9:00 Breakfast

9:00-10:00 Shinobu Hosono (University of Tokyo), "On the mirror family of Reye congruence

Calabi-Yau threefolds"

10:00-10:30 Coffee Break, TCPL

10:30-11:30 Hans Jockers (Universität Bonn), "Conifold transitions in M-theory on Calabi-Yau

fourfolds"

11:30-13:30 Lunch

13:30-14:30 Richard Garavuso (University of Alberta), "Hori-Vafa mirror periods, Picard-Fuchs

equations, and Berglund-Huebsch-Krawitz duality"

14:30-15:30 Coffee Break, TCPL 17:30-19:30 Dinner

Wednesday

7:00-9:00 Breakfast

9:00-10:00 Sampei Usui (Osaka University), "Log mixed Hodge theory; feeling relation with mirror symmetry"

10:00-10:30 Coffee Break, TCPL

10:30-11:30 James Lewis (University of Alberta), "Hodge-type conjectures and Abel-Jacobi maps"

11:30-13:30 Lunch

14:00-15:30 Coffee Break, TCPL

17:30-19:30 Dinner

19:30-20:30 Josh Lapan (McGill University), "Beyond CICYs Through Non-Abelian GLSMs"

Thursday

7:00-9:00 Breakfast

9:00-10:00 Stefan Mendez-Diez (University of Alberta), "T-duality of Real Elliptic Curves and KR-theory"

10:00-10:30 Coffee Break, TCPL

10:30-11:30 Andreas Malmendier (Colby College), "Kummer surfaces associated with Seiberg-Witten curves"

11:30-13:30 Lunch

13:30-14:30 Andrey Novoseltsev (University of Alberta), "Lattice polarized K3 fibrations of Calabi-Yau threefolds with $h^{2,1} = 1$ "

14:30-15:30 Coffee Break, TCPL

17:30-19:30 Dinner

19:30-20:30 Alan Thompson (University of Alberta), "Degenerations of K3 surfaces of degree two"

Friday

7:00-9:00 Breakfast

9:00- Informal Discussions 10:00-11:00 Coffee Break, TCPL

11:30-13:30 Lunch

Checkout by 12 noon.

** 5-day workshop participants are welcome to use BIRS facilities (BIRS Coffee Lounge, TCPL and Reading Room) until 3 pm on Friday, although participants are still required to checkout of the guest rooms by 12 noon. **