

# Interactions of Geometry and Topology in dimensions 3 and 4

## Mar 22 - Mar 27, 2009

### 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, 2nd floor lounge, Corbett Hall

**\*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 Max Bell 159 (Max Bell Building accessible by walkway on 2nd floor of Corbett Hall). LCD projector, overhead projectors and blackboards are available for presentations. Please note that the meeting space designated for BIRS is the lower level of Max Bell, Rooms 155–159. Please respect that all other space has been contracted to other Banff Centre guests, including any Food and Beverage in those areas.

### SCHEDULE

You are welcome to schedule lectures as you see fit, as long as you adhere to the meal times (noted above), coffee break start and end times (noted below) and take into account the "welcome" on Monday morning, the Banff Centre tour at 1:00 pm, and the group photo at 2:00 pm every Monday afternoon.

When your schedule is finalized, please e-mail it to the BIRS Station Manager [birmsgr@birs.ca](mailto:birmsgr@birs.ca) by 12 noon on the Thursday before your arrival.

You are also encouraged to e-mail the schedule to all of your participants. An electronic mail list is offered to each workshop, at the address: [09w5095@lists.birs.ca](mailto:<09w5095>@lists.birs.ca). More information about your mail list is available by clicking on the "Mailing List" link on your workshop home page. If there is no such link, and you would like a mail list, please request one at [help@birs.ca](mailto:help@birs.ca).

#### Sunday

- 16:00** Check-in begins (Front Desk - Professional Development Centre - open 24 hours)  
Lecture rooms available after 16:00 (if desired)
- 17:30–19:30** Buffet Dinner, Sally Borden Building
- 20:00** Informal gathering in 2nd floor lounge, Corbett Hall (if desired)  
Beverages and small assortment of snacks available on a cash honour-system.

## Monday

- 7:00–8:45** Breakfast  
**8:45–9:00** Introduction and Welcome to BIRS by BIRS Station Manager, Max Bell 159  
**9:00–10:00** P. Kronheimer (Harvard) *Floer's instanton homology for knots*  
**10:00** Coffee Break, 2nd floor lounge, Corbett Hall  
**10:15–11:15** V. Colin (Nantes) *Contact homologies for sutured manifolds*  
**11:15–12:15** C. Gordon (U Texas) *Unsolvable problems about higher-dimensional knot groups*  
**12:15–13:00** Lunch  
**13:00–14:00** Guided Tour of The Banff Centre; meet in the 2nd floor lounge, Corbett Hall  
**14:00** Group Photo; meet on the front steps of Corbett Hall  
(can be scheduled for a different time or day if required)  
**14:15–15:15** M. Hedden (MSU) *Relative adjunction inequalities for knot Floer homology and applications*  
**15:15** Coffee Break, 2nd floor lounge, Corbett Hall  
**15:30–16:30** K. Wehrheim (MIT)  *$SU(N)$  invariants for 3-manifolds via decomposition and Lagrangian correspondences*  
**17:30–19:30** Dinner

## Tuesday

- 7:00–9:00** Breakfast  
**9:00–10:00** Y. Lekili (MIT) *Heegaard Floer homology of broken fibrations over the circle*  
**10:00** Coffee Break, 2nd floor lounge, Corbett Hall  
**10:15–11:15** C. Livingston (Indiana) *Low crossing number knots: concordance and the 4-genus*  
**11:15–12:15** E. Grigsby (Columbia) *Khovanov homology, Sutured Floer homology, and naturality*  
**12:15–14:00** Lunch  
**14:00–15:00** A. Stipsicz (Renyi Institute) *Computation of Heegaard Floer homologies*  
**15:00** Coffee Break, 2nd floor lounge, Corbett Hall  
**15:30–16:30** N. Dunfield (Illinois) *Increasing the number of fibered faces of arithmetic hyperbolic 3-manifolds*  
**16:30–17:30** T. Ekhholm (Uppsala) *Rational SFT, linearized Legendrian contact homology, and Lagrangian Floer cohomology*  
**17:30–19:30** Dinner

## Wednesday

- 7:00–8:30** Breakfast  
**8:30–9:30** S. Jabuka (U. Nevada Reno) *Rational Witt classes and unknotting numbers*  
**9:30–10:30** M. Hutchings (Berkeley) *Using  $ECH=SWF$  to improve on the Weinstein conjecture*  
**10:30** Coffee Break, 2nd floor lounge, Corbett Hall  
**10:45–11:45** R. Fintushel (MSU) *Exotic Cyclic Group Actions on Smooth 4-Manifolds*  
**11:45–12:45** L. Ng (Duke) *Knot contact homology and string topology*  
**12:45–13:30** Lunch  
Afternoon is free!  
**17:30–19:30** Dinner

**Thursday****7:00–9:00** Breakfast**9:00** Lectures

Coffee Break, 2nd floor lounge, Corbett Hall - to START no earlier than 10 am

Lectures

**11:30–13:30** Lunch

Lectures

Coffee Break, 2nd floor lounge, Corbett Hall - to END no later than 3:30 pm.

Lectures

**17:30–19:30** Dinner

Lectures (if desired)

**Friday****7:00–9:00** Breakfast**9:00** Lectures (if desired)

Informal Discussions recommended, as many participants must catch early flights

Coffee Break, 2nd floor lounge, Corbett Hall - to START no earlier than 10 am

**11:30–13:30** Lunch**Checkout by 12 noon.**

\*\* 5-day workshops are welcome to use the BIRS facilities (2nd Floor Lounge, Max Bell Meeting Rooms, Reading Room) until 3 pm on Friday, although participants are still required to checkout of the guest rooms by 12 noon. \*\*

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ABSTRACTS  
(in alphabetic order by speaker surname)

Speaker: **Name** (Affiliation)

Title: *Title*

Abstract: Abstract Text

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Abstract: Abstract Text

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Title: *Title*

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