

# Convex bodies and representation theory

## BIRS Half Workshop: 2 Feb 2014 - 7 Feb 2014

### 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 TransCanada Pipelines Pavilion (TCPL). LCD projector and blackboards are available for presentations. Ceiling-mounted video cameras are installed in the main lecture room of 201, TCPL. To enable both half workshops to use the recording facilities during the week, one group will be assigned to Room 201 during the mornings and to Room 202 in the afternoons.

### (TENTATIVE) SCHEDULE

The schedule is still tentative in the sense that the organizers are open to suggestions so please feel free to talk to us. (There are also a few “TBA” slots.) In particular, there is another half-workshop going on simultaneously to ours on “Positivity of linear series and vector bundles”, and we have arranged to have a joint session with them on Wednesday morning. We are open to suggestions of other ways the two workshops can interact.

#### Sunday

- 16:00** Check-in begins (Front Desk - Professional Development Centre - open 24 hours)  
**17:30–19:30** Buffet Dinner, Sally Borden Building  
**20:00** Informal gathering in 2nd floor lounge, Corbett Hall  
Beverages and a 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 Room 201  
**9:00–10:00** Askold Khovanskii, *Convex bodies and representation theory, Part 1*, Room 201  
10:00–10:30 Coffee Break  
**10:30–11:30** Kiumars Kaveh, *Convex bodies and representation theory, Part 2*, Room 201  
11:30–13:00 Lunch  
**13:00–14:00** Guided Tour of The Banff Centre; meet in the 2nd floor lounge, Corbett Hall  
**14:00–15:00** Susan Tolman, *Cohomology of quotients of Hamiltonian loop group actions*, Room 202  
15:00–15:30 Coffee Break  
**15:30–16:30** Nicholas Perrin, *Quantum K-theory of homogeneous spaces*, Room 202  
**16:30** Group Photo; meet on the front steps of Corbett Hall  
17:30–19:30 Dinner

## Tuesday

- 7:00–9:00 Breakfast  
**9:00–10:00** Valentina Kiritchenko, *Okounkov polytopes of Bott-Samelson varieties* , Room 201  
10:00–10:30 Coffee Break  
**10:30–11:30** Vladlen Timorin, *On the theory of coconvex bodies*, Room 201  
11:30–13:30 Lunch  
**13:30–14:30** Klaus Altmann, *Okounkov bodies and versal deformations of toric singularities*, **Room 201**  
14:30–15:00 Coffee Break  
**15:00–16:00** Boris Kazarnovskii, *Exponential sums: Kusnirenko–Bernstein theorem and convex polyhedra in complex space (old and recent results)* , Room 202  
17:30–19:30 Dinner

## Wednesday

*Joint session: (with the parallel half-workshop “Positivity of linear series and vector bundles”)*

- 7:00–9:00 Breakfast  
**9:00–9:30** Alex Kuronya, *Local positivity in convex geometric terms* , Room 201  
9:30–9:45 Break  
**9:45–10:15** Xin Zhou, *Asymptotic Schur decomposition of Veronese syzygy functors* , Room 201  
10:15–10:45 Coffee Break  
**10:45–11:15** Tomek Szemberg, *Minkowski decomposition of Okounkov bodies on surfaces*, Room 201  
11:30–13:30 Lunch  
Free Afternoon  
17:30–19:30 Dinner

## Thursday

- 7:00–9:00 Breakfast  
**9:00–10:00** Jonathan Weitsman, *Integrable systems and Berenstein-Zelevinsky polytopes* , Room 201  
10:00–10:30 Coffee Break  
**10:30–11:30** Michel Brion, *On linearization of line bundles* , Room 201  
11:30–13:30 Lunch  
**13:30–14:30** Chris Manon, *Okounkov bodies and Kaveh-Harada construction for character varieties*, Room 202  
14:30–15:00 Coffee Break  
**15:00–16:00** *TBA*, Room 202  
17:30–19:30 Dinner

## Friday

- 7:00–9:00 Breakfast  
**9:00–10:00** *TBA*, Room 201  
10:00–10:30 Coffee Break  
**10:30–11:30** Informal discussions  
11:30–13:30 Lunch

**Checkout by  
12 noon.**

\*\* 5-day workshop participants are welcome to use BIRS facilities (BIRS 2nd floor lounge, TCPL and Reading Room) until 3 pm on Friday, although participants are still required to checkout of the guest rooms by 12 noon. \*\*