# Affine Convex Geometric Analysis <br> January 12-16, 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

| 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 small assortment of snacks available on a cash honour-system. |
| Monday |  |
| $\mathbf{7 : 0 0 - 9 : 0 0}$ | Breakfast |
| $\mathbf{9 : 0 0 - 9 : 1 5}$ | Introduction and Welcome to BIRS by BIRS Station Manager, Max Bell 159 |
| $\mathbf{9 : 1 5 - 1 0 : 0 5}$ | Rolf Schneider |
|  | The role of the volume product in stochastic geometry |
| $\mathbf{1 0 : 0 5 - 1 1 : 0 0}$ | Coffee Break, 2nd floor lounge, Corbett Hall |
| $\mathbf{1 1 : 0 0}$ | Group Photo; meet on the front steps of Corbett Hall |
| $\mathbf{1 1 : 1 5 - 1 1 : 4 0}$ | Mathieu Meyer |
|  | Once again on Mahler's problem |
| $\mathbf{1 1 : 5 0 - 1 3 : 0 0}$ | Lunch |
| $\mathbf{1 3 : 0 0 - 1 4 : 0 0}$ | Guided Tour of The Banff Centre; meet in the 2nd floor lounge, Corbett Hall |
| $\mathbf{1 4 : 0 0 - 1 4 : 5 0}$ | Nicole Tomczak-Jaegermann |
|  | Random points uniformly distributed on an isotropic convex body |
| $\mathbf{1 5 : 0 0 - 1 5 : 3 0}$ | Coffee Break, 2nd floor lounge, Corbett Hall |
| $\mathbf{1 5 : 3 0 - 1 5 : 5 5}$ | Alexander Litvak |
|  | On vectors uniformly distributed over a convex body |
| $\mathbf{1 6 : 0 0 - 1 6 : 2 5}$ | Joseph Lehec |
|  | A functional approach to the Blaschke-Santaló inequality |
| $\mathbf{1 6 : 3 0 - 1 6 : 5 5}$ | Matthieu Fradelizi |
|  | The volume product of convex bodies with many symmetries |
| $\mathbf{1 8 : 0 0 - 1 9 : 3 0}$ | Dinner |


| Tuesday |  |
| :---: | :---: |
| 7:00-9:00 | Breakfast |
| 9:30-10:20 | Matthias Reitzner |
|  | A classification of $\mathrm{SL}(n)$ invariant valuations |
| 10:30-11:00 | Coffee Break, 2nd floor lounge, Corbett Hall |
| 11:00-11:25 | Fedor Petrov |
|  | Affine surface area and rational points on convex surfaces |
| 11:30-11:55 | Christoph Haberl |
|  | Blaschke valuations |
| 12:00-13:30 | Lunch |
| 14:00-14:50 | Peter J. Olver |
|  | Moving frames, differential invariants and surface geometry |
| 15:00-15:30 | Coffee Break, 2nd floor lounge, Corbett Hall |
| 15:30-15:55 | Franz Schuster |
|  | Valuations and affine Sobolev inequalities |
| 16:00-16:25 | Christian Steineder |
|  | The volume of the projection body and binary coding sequences |
| 16:30-16:55 | Carlo Nitsch |
|  | Affine isoperimetric inequalities and Monge-Ampère equations |
| 18:00-19:30 | Dinner |
| Wednesday |  |
| 7:00-9:00 | Breakfast |
| 9:30-10:20 | Franck Barthe |
|  | Remarks on conservative spin systems and related questions in convexity |
| 10:30-11:00 | Coffee Break, 2nd floor lounge, Corbett Hall |
| 11:00-11:25 | Andrea Colesanti |
|  | Recent contributions to the Christoffel problem coming from partial differential equations |
| 11:30-11:55 | Marina Yaskina |
|  | Non-symmetric convex bodies and the Fourier transform |
| 12:00-13:30 | Lunch |
|  | Free Afternoon |
| 17:30-19:30 | Dinner |

Thursday
$\begin{array}{ll}\text { 7:00-9:00 } & \text { Breakfast } \\ \text { 9:30-9:55 } & \text { Gautier Berck }\end{array}$
Convexity of $L_{p}$ intersection bodies
10:00-10:25 Mark Rudelson
TBA
10:30-11:00 Coffee Break, 2nd floor lounge, Corbett Hall
11:00-11:25 Mark Meckes
On the measure-theoretic analogue of Dvoretzky's theorem
11:30-11:55 Eugenia Saorín Gómez
Approaching $K$ by its form body and kernel
12:00-13:30 Lunch
14:00-14:25 Vlad Yaskin
On strict inclusions in hierarchies of convex bodies
14:30-14:55 Marisa Zymonopoulou
New examples of non-intersection bodies
15:00-15:30 Coffee Break, 2nd floor lounge, Corbett Hall
15:30-15:55 Olivier Guédon
Invertibility of matrices with iid columns
16:00-16:25 Efrén Morales Amaya
Characterization of ellipsoids by means of parallel translated sections
16:30-16:55 Daniel Hug
Random polytopes: geometric and analytic aspects
17:00-17:25 Yehoram Gordon
TBA
18:00-19:30 Dinner
Friday
7:00-9:00 Breakfast
9:30-10:00 Informal discussion, 2nd floor lounge, Corbett Hall
10:00-11:00 Coffee Break, 2nd floor lounge, Corbett Hall
11:00-11:30 Informal discussion, 2nd floor lounge, Corbett Hall
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. ${ }^{* *}$

