BIRS Workshop

Convex Sets and their Applications

March 4, 2006 to March 9, 2006

Sunday, March 5, 2006
Main lecture hall, Max Bell 159[1]

BREAKFAST	7:00 – 9:00 am, 2nd floor lounge, Corbett Hall
9:00 – 9:15 am	Introduction and Welcome to BIRS by BIRS Station Manager
9:15 – 9:45 am	**Rolf Schneider** *Intersections of balls in normed spaces*
9:50 – 10:20 am	**Elisabeth Werner** *Spaces between polytopes and zonotopes*
COFFEE BREAK	2nd floor lounge, Corbett Hall
10:50 – 11:20 am	**Margaret Bayer** *Flag vectors of polytopes: an overview*
11:25 – 11:55 am	**Joseph Ling** *Non-linear inequalities for 4-dimensional convex polytopes*
LUNCH	11:30 am – 1:30 pm, Donald Cameron Hall[2]
2:30 – 3:00 pm	**Alexander Litvak** *On the vertex index of convex bodies*
3:05 – 3:35 pm	**Ferenc Fodor** *Geometric transversals in low and high dimensions*
COFFEE BREAK	2nd floor lounge, Corbett Hall
4:10 – 4:40 pm	**József Solymosi** *Additive Discrete Geometry*
4:45 – 5:15 pm	**Iskander Aliev** *A sharp lower bound for the Frobenius number*
5:20 – 5:50 pm	**Zsolt Lángi** *Isoperimetric inequalities for k_g-polygons*
DINNER	5:30 – 7:30 pm, Donald Cameron Hall[2]

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[1]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.

[2]Please remember to scan your meal card at the host/hostess station in the dining room for each lunch and dinner.

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March 4, 2006 to March 9, 2006

Monday, March 6, 2006
Main lecture hall, Max Bell 159[1]

BREAKFAST	7:00 – 9:00 am, 2nd floor lounge, Corbett Hall
9:15 – 9:45 am	**Valeriu Soltan** *Homothety classes of convex sets*
9:50 – 10:20 am	**Károly Bezdek** *Short Billiards*
COFFEE BREAK	2nd floor lounge, Corbett Hall
10:50 – 11:20 am	**Roman Vershynin** *New convex geometry problems in linear programming*
11:25 – 11:55 am	**Carsten Schütt** *Minima of a sequence of Gaussian random variables*
1:00 – 2:00 pm	*A free guided tour of The Banff Centre* *Meeting point: 2nd floor lounge, Corbett Hall*
LUNCH	11:30 am – 1:30 pm, Donald Cameron Hall[2]
2:15 – 2:45 pm	**Alexander Koldobsky** *Inequalities of Khinchin type and sections of L_p-balls*
2:50 – 3:20 pm	**Alina Stancu** *From a characterization of ellipsoids to the p-affine surface area*
COFFEE BREAK	2nd floor lounge, Corbett Hall
3:55 – 4:25 pm	**Monika Ludwig** *Elementary moves on triangulations*
4:30 – 5:00 pm	**Natalia Garcia Colin** *On a generalization of a problem of McMullen* *regarding neighborliness in convex polytopes*
5:10 – 5:40 pm	**Carl Lee** *Multiple views of h-vectors*
5:45 – 6:15 pm	**Richard Ehrenborg** *The cd-index, polytopes and Gorenstein* lattices*
DINNER	5:30 – 7:30 pm, Donald Cameron Hall[2]

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March 4, 2006 to March 9, 2006

Tuesday, March 7, 2006
Main lecture hall, Max Bell 159[1]

BREAKFAST	7:00 – 9:00 am, 2nd floor lounge, Corbett Hall
9:00 – 9:30 am	**Konrad Swanepoel** *Explicit upper bounds for edge-antipodal polytopes*
9:35 – 10:05 am	**Márton Naszódi** *Touching homothetic bodies and antipodality*
COFFEE BREAK	2nd floor lounge, Corbett Hall
10:30 – 11:00 am	**Wolfgang Weil** *Directed tomographic transforms*
11:05 – 11:35 am	**Carla Peri** *Uniqueness and stability results in geometric tomography*
11:40 – 12:10 am	**Károly Böröczky, Jr.** *Convex bodies of minimal volume, surface area* *and mean width with respect to thin shells*
LUNCH	11:30 am – 1:30 pm, Donald Cameron Hall[2]
	Free Afternoon
DINNER	5:30 – 7:30 pm, Donald Cameron Hall[2]

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Convex Sets and their Applications
March 4, 2006 to March 9, 2006

Wednesday, March 8, 2006
Main lecture hall, Max Bell 159[1]

BREAKFAST	7:00 – 9:00 am, 2nd floor lounge, Corbett Hall
9:15 – 9:45 am	**Jesús A. De Loera** *Transportation Polytopes: a twenty-year update*
9:50 – 10:20 am	**David Bremner** *Approaches to enumerating vertices and* *extreme rays of polyhedra under symmetry*
COFFEE BREAK	2nd floor lounge, Corbett Hall
10:50 – 11:20 am	**Markus Kiderlen** *Spherical liftings and projections in convex geometry*
11:25 – 11:55 am	**Efrén Morales** *Generalization of Rogers Theorem and characterizations of ellipsoids*
Group Photo	*Directly after last lecture* *Meeting point: front steps of Corbett Hall*
LUNCH	11:30 am – 1:30 pm, Donald Cameron Hall[2]
2:15 – 2:45 pm	**Paolo Gronchi** *Shadow systems*
2:50 – 3:20 pm	**Maria Hernández Cifre** *On the minimal annulus of a convex body:* *some optimization problems*
COFFEE BREAK	2nd floor lounge, Corbett Hall
3:55 – 4:25 pm	**Franz Schuster** *An arithmetic proof of John's ellipsoid theorem*
4:30 – 5:00 pm	**Réne Brandenberg** *Minimal containment under homothetics – theory and algorithms*
5:10 – 5:40 pm	**Shmuel Onn** *Multiway polytopes: universality and convex optimization*
5:45 – 6:15 pm	**Peter Papez** *Ball-Polyhedra*
DINNER	5:30 – 7:30 pm, Donald Cameron Hall[2]

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BIRS Workshop

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March 4, 2006 to March 9, 2006

Thursday, March 9, 2006
Main lecture hall, Max Bell 159[1]

BREAKFAST	7:00 – 9:00 am, 2nd floor lounge, Corbett Hall
9:15 – 9:45 am	**David Larman** *Determing properties of convex bodies* *from information about certain sections*
9:50 – 10:20 am	**Grzegorz Sójka** *Minor illuminations and convex bodies determination*
COFFEE BREAK	2nd floor lounge, Corbett Hall
10:50 – 11:20 am	**Jörg M. Wills** *On the zeros of the Ehrhart polynomial*
Checkout by 12 noon	
LUNCH	11:30 am – 1:30 pm, Donald Cameron Hall[2]

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