Geometric properties of solutions of non–linear PDE's and their applications July 17–22 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, 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. 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 17:30–19:30 20:00	Check-in begins (Front Desk - Professional Development Centre - open 24 hours) Lecture rooms available after 16:00 (if desired) Buffet Dinner, Sally Borden Building 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, Max Bell 159
9:00 - 9.50	R. Magnanini, The location of the hot spot in a grounded convex conductor
10.00 - 10.30	Coffee Break, 2nd floor lounge, Corbett Hall
10.30 – 11.20	S. Sakaguchi, Reaction-diffusion with similar level sets
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	Group Photo; meet on the front steps of Corbett Hall
14.10 - 15.00	G. Philippin, Blow-up phenomena for solutions of some non-linear parabolic problems
$15.00 {-} 15.30$	Coffee Break, 2nd floor lounge, Corbett Hall
$15.30 {-} 16.20$	K. Ishige, L^p norms of non-negative Schrödinger heat semigroup and the large time
	behavior of hot spots
16.30 – 17.20	C. Nitsch, The longest-shortest fence and sharp Poincaré-Sobolev inequalities
17:30 - 19:30	Dinner

Tuesday	
7:00-9:00	Breakfast
9:00 - 9.50	X. Ma, The convexity of the solutions of heat equation and its geometry applications
10.00 - 10.30	Coffee Break, 2nd floor lounge, Corbett Hall
10.30 – 11.20	CS. Lin, The counting topological degree formulas for a class of generalized Liouville
	systems
11.30 – 12.20	B. Bian, Convexity and partial convexity for solutions of partial differential equations
12:30 - 13:30	Lunch
14.00 - 14.45	R. M. Hurry–Syrjanen, On the $(1, p)$ –Poincaré inequality
$14:\!50\!-\!15.15$	Coffee Break, 2nd floor lounge, Corbett Hall
15.15 - 16.00	J. Dolbeault, Improved Sobolev inequalities, relative entropy and fast diffusion equations
16.05 - 16:50	J. Xiao, Singularities for Morrey potentials with applications to some non-linear elliptic
	systems
16.55 - 17:25	R.Stanczy, Uniqueness and multipilicity results for some local and nonlocal ellpitic equa-
	tions under geometrical assumptions on the domain and the set of solutions
17:30 - 19:30	Dinner
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Wednesday	
7:00-8:45	Breakfast
8:45 - 9.30	X. Cabré, Uniqueness and stability of saddle-shaped solutions to the Allen-Cahn equation
9:35 - 10.20	C. Gutierrez, Geometric optics and the Monge–Ampère type equations
10:25 - 10.50	Coffee Break, 2nd floor lounge, Corbett Hall
10.50 - 11.35	D. Yang, The Orlicz Minkowski problem
11.40 - 12.10	Q. Li, Complex Monge-Ampère equations on Hermitian manifolds
12:15-13:30	Lunch
12010 10000	Free Afternoon
17:30 - 19:30	Dinner
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Thursday	
7:00-8:45	Breakfast
8:45-9.30	A. Henrot, About the two first eigenvalues of the Laplacian
9:35-10:20	C. Trombetti, Sharp estimates for a non-local eigenvalue problem
10:25-10:50	Coffee Break, 2nd floor lounge, Corbett Hall
10:50-11:35	J. Spruck, Boundary value problems at infinity and their curvature flows in Hyperbolic
10.00 11.00	space
11:40-12:10	N. Phuc, A nonlinear Calderón-Zygmund theory arising from the p-laplacian and its
11.10 12.10	applications
12:15 - 13:30	Lunch
$12.10 \ 13.50 \ 14.00 - 14.45$	B. Brandolini, Symmetrization for singular elliptic equations
14:50-15.15	Coffee Break, 2nd floor lounge, Corbett Hall
14:50-15:15 15:15-16:00	F. Gazzola, Radial solutions to the Emden–Fowler equation on the Hyperbolic space
16:05-16:50	W. Reichel, Electrostatic characterization of spheres
17:30-19:30	Dinner
T1.00 T3.00	

Friday	
7:00 - 8:45	Breakfast
8:45 - 9:30	A. Cianchi, A sharp iteration principle for higher-order Sobolev-type embeddings
9:35 - 10:05	J. Prajapat, On Chern-Simons system of equations: Existence, asymptotic behaviour and uniqueness
10:10-10:30	Coffee Break, 2nd floor lounge, Corbett Hall
10:30 - 11.15	L. Ni, Estimates on the modulus of expansion for vector fields solving non-linear equa- tions
11.20 - 12:05	B. Kawohl, Variations on the p-Laplacian
Checkout by	
12 noon.	

** 5-day workshops are welcome to use 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. **