



Banff International Research Station

for Mathematical Innovation and Discovery

Operator Algebras and Representation Theory: Frames, Wavelets and Fractals October 9-10, 2010

MEALS

Meal plan included in the workshop: buffets in the Vistas Main Dining Room, 4th floor, Sally Borden Building (breakfast: 7:00 – 9:30 am; lunch: 11:30 am – 1:30 pm; dinner: 5:30 – 7:30 pm)

Coffee Breaks included in the workshop: As per daily schedule, 2nd floor lounge, Corbett Hall

MEETING ROOMS

All lectures will be held in Max Bell 159. 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 Beverages in those areas.*

SCHEDULE

Friday October 8

- 16:00** Check-in begins (Front Desk – Professional Development Centre - open 24 hours)
Lecture rooms available after 16:00.
- 17:30-19:30** Dinner at the Vistas main dining room, 4th floor, Sally Borden Building
- 19:30** Informal gathering in 2nd floor lounge, Corbett Hall
Beverages and a small assortment of snacks are available in the lounge on a cash honor system.

Saturday October 9

- 07:00-09:00** Breakfast at the Vistas main dining room, 4th floor, Sally Borden Building
- 09:00-09:50** Peter Casazza (University of Missouri)
[Kadison-Singer: A few results and a lot of questions](#)
- 10:00-11:00** Coffee Break, 2nd floor lounge, Corbett Hall
- 11:00-11:20** Shidong Li (San Francisco State University)
[Sparse dual frames and the most compact dual Gabor function](#)
- 11:30-11:50** Dorin Dutkay (University of Central Florida)
Fourier bases on fractal measures
- 12:00-13:30** Lunch at the Vistas main dining room, 4th floor, Sally Borden Building
- 13:30-13:50** Bin Han (University of Alberta)
[Some results and open problems on nonhomogeneous wavelet systems](#)
- 14:00-14:20** Jean Pierre Gabardo (McMaster University)
[Convolution inequalities and Beurling density of wavelet systems](#)
- 14:30-15:30** Coffee Break, 2nd floor lounge, Corbett Hall
- 15:30-15:50** Jens Gerlach Christensen (University of Maryland)
[Sampling and representations of Lie groups \(Slides\)](#)
- 16:00-16:20** Denguang Han (University of Central Florida)
[Group representation frames: questions and partial results](#)
- 16:30-16:50** Keri Kornelson (University of Oklahoma)
[Operators on Bernoulli measures spaces](#)
- 17:00-17:20** Michael Lamoureux (University of Calgary)
Generalized frames in seismic imaging
- 17:30-19:30** Dinner at the Vistas main dining room, 4th floor, Sally Borden Building

Sunday October 10

- 07:00-09:00** Breakfast
- 09:00-09:20** Judith Packer (University of Colorado)
[Operators arising from generalized multiresolution analyses](#)
- 09:30-09:50** Marcin Bownik (University of Oregon)
[Existence of frames with prescribed norms and frame operator](#)
- 10:00-10:30** Coffee Break, 2nd floor lounge, Corbett Hall
- 10:30-10:50** Qiyu Sun (University of Central Florida)
Nonlinear Wiener's lemma and numerical implementation
- 11:00-11:20** Peter Massopust (Technische Universitat Anchen)
[Exponential B-splines and the partition of unity property](#)
- 12:00 noon** Checkout by 12 noon.
- 12:00-13:30** Lunch at the Vistas main dining room, 4th floor, Sally Borden Building

2-day workshops are welcome to use BIRS facilities (2nd Floor Lounge, Max Bell Meeting Rooms, Reading Room) until 15:00 on Sunday, although participants are still required to checkout of the guest rooms by 12 noon. There is no coffee break service on Sunday afternoon, but self-serve coffee and tea are always available in the 2nd floor lounge, Corbett Hall.