

# PIMS Postdoctoral Retreat in Stochastics

## Sept. 19-20

### MEALS

Coffee Breaks: As per daily schedule, in the foyer of the TransCanada Pipeline Pavilion (TCPL) (*included in workshop*)

*\*\*Meal tickets should be issued upon check-in. They are valid at Vistas Dining Room on the 4th floor of the Sally Borden Building starting with dinner on Friday and ending with lunch on Sunday (breakfast: 7:00-9:30am; lunch: 11:30am-1:30pm; dinner: 5:30-7:30pm). They are not valid at other food outlets in the Banff Centre. You will also find a good selection of restaurants in the town of Banff which is a 10-15 minute walk from Corbett Hall.\*\**

\*\* 2-day workshops are welcome to use BIRS facilities (2nd Floor Lounge, TCPL, Reading Room) until 15:00 on Sunday. Coffee breaks are scheduled Sat. and Sun. morning, and self-serve coffee and tea are always available in the 2nd floor lounge of Corbett Hall. Other beverages and a small assortment of snacks are also available in the 2nd floor lounge, Corbett Hall (cash honor system). \*\*

### MEETING ROOMS

All lectures will be held in the lecture theater in the TransCanada Pipelines Pavilion (TCPL). An LCD projector, a laptop, a document camera, and blackboards are available for presentations.

## SCHEDULE

### Friday Sept. 19

16:00 Check-in begins (Front Desk - Professional Development Centre - open 24 hours)

### Saturday Sept. 20

7:00-8:50 Breakfast

8:50-9:00 Welcoming Remarks: Martin Barlow, Director of PIMS

#### Session 1 (Chair, Mike Kouritzin)

9:00-9:45 Speaker: Samira Sadeghi

Title: Outer Products and Stochastic Approximation Algorithms in a Heavy-tailed and Long-range Dependent Setting

9:45-10:30 Speaker: Khoa Le

Title: Large time asymptotic for the parabolic Anderson model driven by spatially correlated noise

10:30-10:50 Coffee Break, TCPL

#### Session 2 (Chair, Ed Perkins)

10:50-11:35 Speaker: Chi Dong

Title: The Replication of Stochastic Processes

11:35-12:20 Speaker: Richard Balka

Title: Restrictions of Brownian Motion

12:20-14:00 Lunch

#### Session 3 (Chair, Omer Angel)

14:00-14:45 Speaker: Matt Junge

Title: Splitting hairs (by choice)

14:45-15:30 Speaker: Ben Wallace

Title: On the Correlation Function for SAW and the  $\phi^4$  model

15:30-16:30 Open Problem Session

16:30-18:15 Hike to Tunnel Mt. (or other destination)

18:15-19:30 Dinner

20:00-21:00 Informal Planning Session for PTCS—for postdocs and participating faculty. (Attendance of the Postdoctoral Fellows is requested if possible.)

In lounge at Corbett Hall.

### Sunday Sept. 21

7:00-9:00 Breakfast

#### Session 4 (Chair, Martin Barlow)

9:00-9:45 Speaker: Brett Kolesnik

Title: A geodesic metric space made from Brownian motion

9:45-10:30 Speaker: Mathav Murugan

Title: Anomalous random walks with heavy-tailed jumps

10:30-10:50 Coffee break, TCPL

#### Session 5 (Chair, Tony Ware)

10:50-11:35 Speaker: Jonathan Chavez

Title: Stochastic Modeling of Limit Order Books:

Convergence of the Price Process, Simulation and Applications

11:35-12:20 Speaker: Zhenan Wang

Title: Stochastic De Giorgi iteration

12:20-1:30 Lunch

Checkout from room by 12 noon.