

Information theory and statistics for large alphabets

Oct. 24-28, 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, in the foyer of the TransCanada Pipeline Pavilion (TCPL)

***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 the new lecture theater in the TransCanada Pipelines Pavilion (TCPL). LCD projector, overhead projectors and blackboards are available for presentations.

SCHEDULE

Sunday

- 16:00** Check-in begins (Front Desk - Professional Development Centre - open 24 hours)
Lecture rooms available after 16:00 (if desired)
- 17:30–19:30** Buffet Dinner, Sally Borden Building
- 20:00** Informal gathering in 2nd floor lounge, Corbett Hall (if desired)
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, TCPL
- 9:00–10:30** Introductions (5 minutes per person)
- 10:30–10:50** Coffee Break, TCPL
- 10:50–11:35** Dean Foster, *Spectral dimensionality reduction for HMMs*
- 11:35–13:00** Lunch
- 13:00–14:00** Guided Tour of The Banff Centre; meet in the 2nd floor lounge, Corbett Hall
- 14:00–15:00** Mesrob Ohanessian, *Canonical estimation in a rare-events regime*
- 15:00–15:30** Coffee Break, TCPL
- 15:30–16:15** Ramon van Handel, *Estimating Markov order*
- 16:15–16:45** Serdar Yuksel, *Topological properties of stochastic kernels*
- 16:45–17:30** Sidharth Jaggi, *Large networks and large alphabets*
- 17:30–19:30** Dinner

Tuesday

7:00–9:00	Breakfast
9:00–10:00	Peter Orbanz, <i>Bayesian nonparametrics</i>
10:00–10:30	Coffee Break, TCPL
10:30–11:30	Sonia Petrone, <i>More Bayesian nonparametrics</i>
11:30–12:15	Jaeyong Lee, <i>Species sampling and related problems</i>
12:15–13:30	Lunch
13:30	Group Photo; meet on the front steps of Corbett Hall
13:40–14:40	Alon Orlitsky, <i>Foreseeing the unseen: probability estimation over large alphabets</i>
14:40–15:00	Coffee Break, TCPL
15:00–16:00	Prasad Santhanam, <i>Compression and prediction over large alphabets</i>
16:00–16:30	Krishna Viswanathan, <i>The pattern-maximum-likelihood estimator</i>
16:30–17:15	Pascal Vontobel, <i>Bethe approximation of the pattern maximum likelihood distribution</i>
17:30–19:30	Dinner

Wednesday

7:00–9:00	Breakfast
9:00–10:00	Greg Valiant, <i>Symmetric property estimation</i>
10:00–10:30	Paul Valiant, <i>More symmetric property estimation</i>
10:30–11:50	Coffee Break, TCPL
10:50–11:35	Tugkan Batu, <i>Testing properties of discrete distributions</i>
11:35–12:05	Ronitt Rubinfeld, <i>Testing properties of collections of distributions</i>
12:05–13:30	Lunch
	Free Afternoon
17:30–19:30	Dinner

Thursday

7:00–9:00	Breakfast
9:00–10:00	Balazs Szegedy, <i>Graphs, combinatorics, and other points of interest</i>
10:00–10:30	Michael Mahoney, <i>Approximate computation and implicit regularization in data analysis</i>
10:30–11:00	Coffee Break, TCPL
11:00–11:30	Alexandr Andoni, <i>Sublinear algorithms via precision sampling</i>
11:30–12:00	David Woodruff, <i>Sublinear time optimization for machine learning</i>
12:00–13:30	Lunch
13:30–14:30	En-hui Yang, <i>Large alphabet problems in lossless and lossy compression</i>
14:30–15:00	Aaron Wagner, <i>Some open problems in probability estimation</i>
15:00–15:30	Coffee Break, TCPL
15:30–16:30	Al Hero, <i>Screening for structure in high dimensional correlation networks</i>
16:30–17:30	Open Problems
17:30–19:30	Dinner

Friday

7:00–9:00	Breakfast
9:00–9:30	Sujay Sanghavi, <i>Robustness and flexibility in high dimensions</i>
9:30–10:00	Venkatesh Saligrama, <i>A mutual information formula for sparse signal processing</i>
10:00–10:20	Coffee Break, TCPL
10:20–10:50	Anima Anandakumar, <i>High dimensional graphical model selection</i>
10:50–11:20	Dayu Huang, <i>Goodness of fit tests with large alphabets</i>
11:20–11:50	Discussion
11:50–13:30	Lunch
Checkout by 12 noon.	

** 5-day workshop participants are welcome to use BIRS facilities (BIRS Coffee Lounge, TCPL and Reading Room) until 3 pm on Friday, although participants are still required to checkout of the guest rooms by 12 noon. **