

Computational Complexity (13w5010)

July 7–12, 2013

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

SCHEDULE

Sunday

- 16:00** Check-in begins (Front Desk - Professional Development Centre - open 24 hours)
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
9:00–9:50 M. Braverman, *Information complexity and exact communication bounds*
9:55–10:45 A. Rao, *Direct Products in Communication Complexity*
10:45–11:00 COFFEE BREAK
11:05–11:55 A. Sherstov, *Communication Lower Bounds Using Directional Derivatives*
12:00–13:30 LUNCH
13:30–14:20 S. Lovett, *Communication is bounded by root of rank*
14:25 Group Photo; meet in foyer of TCPL (photograph will be taken outdoors so a jacket might be required).
14:25–14:45 COFFEE BREAK
14:45–15:35 A. Wigderson, *Association Schemes, Non-Commutative Polynomials and Lasserre Lower Bounds for Planted Clique*
17:30–19:30 DINNER
20:00– *Open Problems* (please sign up)

Tuesday

- 7:00–9:00** BREAKFAST
9:00–9:50 S. Cook, *The Complexity of the Comparator Circuit Value Problem*
9:55–10:45 T. Pitassi, *Average Case Lower Bounds for Monotone Switching Networks*
10:45–11:00 COFFEE BREAK
11:05–11:55 P. Raghavendra, *Approximate constraint satisfaction requires large LP relaxations*
12:00–13:30 LUNCH
13:30–14:20 S. Aaronson, *AM with multiple Merlins*
14:20–14:45 COFFEE BREAK
14:45–15:35 E. Ben-Sasson, *Succinct Computational Integrity and Privacy Research (SCIPR)*
17:30–19:30 DINNER

Wednesday

7:00–9:00	BREAKFAST
9:00–9:50	S. Khot, <i>A Characterization of Strong Approximation Resistance</i>
9:55–10:45	O. Regev, <i>Non-commutative extensions of Grothendieck's inequality</i>
10:45–11:00	COFFEE BREAK
11:05–11:55	S. Kopparty, <i>Constant Rate PCPs for Circuit-SAT with Sublinear Query Complexity</i>
12:00–13:30	LUNCH
17:30–19:30	DINNER

Thursday

7:00–9:00	BREAKFAST
9:00–9:50	S. Vadhan, <i>Pseudorandom Generators via Random Restrictions</i>
9:55–10:45	D. Zuckerman, <i>Pseudorandomness from Shrinkage</i>
10:45–11:00	COFFEE BREAK
11:05–11:55	R. Servedio, <i>Deterministic Approximate Counting for Degree-2 Polynomial Threshold Functions</i>
12:00–13:30	LUNCH
13:30–14:20	P. Gopalan, <i>Locally Testable Codes and Derandomized Hypercubes</i>
14:20–14:45	COFFEE BREAK
14:45–15:35	M. Sudan, <i>Limits of local algorithms</i>
17:30–19:30	DINNER

Friday

7:00–9:00	BREAKFAST
9:00–9:50	A. Yehudayoff, <i>Rounding group actions: examples</i>
9:55–10:45	D. Steurer, <i>Analytical Approach to Parallel Repetition</i>
10:45–11:00	COFFEE BREAK
11:05–11:55	R. Williams, <i>TBA</i>
12:00–13:30	LUNCH & END OF WORKSHOP
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. **