Fulkerson 100, Jul 17-19, 2024, University of Waterloo

Welcome!

We are very happy to host Fulkerson 100: A workshop in celebration of Ray Fulkerson's centenary year of birth, at the University of Waterloo (UW). We welcome you to Waterloo, and the Department of Combinatorics & Optimization (C&O) at the University of Waterloo.

We hope that the workshop, with its mix of invited talks by distinguished researchers in graph theory, combinatorics, optimization, and theoretical Computer Science, and lightning talks and posters by junior researchers, along with ample breaks for discussion, will provide a stimulating atmosphere over the next few days.

We thank the C&O staff (Gen, Carol, and Melissa) for their abundant help in planning this workshop, and especially Gen for her tireless efforts. We also thank all the C&O student volunteers for their help during the conference.

We hope that you will have an enjoyable workshop.

Fulkerson 100 organization committee:

Joseph Cheriyan Bertrand Guenin Chaitanya Swamy, chair

Some snippets of local Information

Venue

The talks take place in QNC 0101, which is accessed via QNC 1101. The reception on Jul 17 evening takes place in the QNC atrium. The poster session and banquet on Jul 18 evening take place in Fed Hall. These locations have been marked on the University of Waterloo campus map included on the last page of this document.

Wifi

WiFi access on UW campus is via the Eduroam network. If you use Eduroam at your home university, then you will likely just be able to connect here. Alternatively, you can obtain guest access quite conveniently via the UniversityofWaterloo network. At the time of connection, a guest account with limited-time access is set up with the information you provide.

Dining

A number of food options are available in and around campus; the map on the last page shows some of the food locations near campus. Away from campus, Uptown Waterloo and downtown Kitchener have a variety of food and drink options including restaurants, cafes, bars, and pubs. A brief selection of these options is shown on the next page.

CLOSE TO CAMPUS

University Shops Plaza

The plaza is located across the tram tracks and consists of various restaurants and a variety of options. Here are just a few suggestions:

Food

- Williams Fresh Café (Soup, sandwiches, coffee)
- Indian Sweet Master (Indian)
- Kismet (Bangladeshi, Indian)
- Seoul Soul (Korean bbq, soups, noodles)
- Pita Factory
- Ken Sushi House (East end across Philip St.)

Coffee and Tea

- Williams Fresh Café (Soup, sandwiches)
- Sweet Dreams Teashop (Bubble tea)

Pubs

Molly Blooms Irish Pub

ON CAMPUS

Food:

- University Club (sit-in dining)
- Student Life Center (SLC food stalls)

Coffee and Tea

- Starbucks (STC, LHI)
- Tim Hortons (SLC, DC)

Pub: Graduate House (craft beer, burgers, and pizza)

OTHER PLACES IN KW

Wildcraft Grill + Long Bar (north of campus), The Bauer Kitchen, Arabella Park Beer Bar (great place for beer)

UPTOWN WATERLOO

Close to the Delta hotel, this area offers a variety of dining options and nice coffee places.

Food

- Abe Erb Waterloo (brewery with comfort food)
- Beertown (vegan/gluten free menu available upon request, good selection of beers)
- Copper Branch (vegan options)
- Famoso Neapolitan Pizzeria
- White Rabbit (good cocktails)
- **Proof Kitchen + Lounge** (in the Delta hotel)
- Jinzakaya (Japanese)
- Jane Bond (veggie and vegan options, craft beer)
- Princess Cafe (sandwiches, soup, beer, coffee)
- Champa Kitchen (Thai, Vietnamese)
- Masala Bay (Indian)
- Dosa Boyz (South indian)

Fine Dining

- King Street Trio (New Canadian cuisine)
- Red House (New Canadian eats, cocktails)
- Loloan Lobby Bar (Southeast Asian cuisine)

Coffee and Tea

- Pilot Coffee Roasters (great coffee)
- Seven Shores (Snacks, sandwiches, and coffee)
- Starbucks

DOWNTOWN KITCHENER

A short tram ride away, downtown Kitchener offers even more choices including:

Kinkaku Izakaya (sushi), **Grand Trunk Saloon** (Southern food with creative cocktails), and **Cafe Pyrus** (vegetarian, vegan, coffee)

Fullkerson 100 schedule

All talks take place in QNC 0101

Time		Wednesday Inly 17		Thursday July 18		Friday July 19
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	8:30-8:50am	Breakfast (light snacks)	0.30 Oc. a	(o)oom theil to the o	m-0 05.8	Drockfood Highly Concolor
	8:50-9am	Welcome and opening remarks	0.00	Dieaniast (iight shacks)	00.0	Dicaniasi (iigiii siiachs)
		Session chair: Bertrand Guenin		Session chair: Bertrand Guenin		Session chair: Chaitanya Swamy
9-9:45am	Gérard Cornuéj Blocking theory ≀	Gérard Cornuéjols Blocking theory and the replication conjecture	Maria Chudno Forbidding indu	Maria Chudnovsky Forbidding induced subgraphs: structure and algorithms	Ravi Kannan The random se _l	Ravi Kannan The random separating hyperplane theorem and learning latent polytopes
9:50-10:10am		Break		Break		Break
		Session chair: Peter Nelson		Session chair: Joseph Cheriyan		Session chair: Levent Tuncel
10:10-10:55am	Dan Král Matroid depth ar	Dan Král Matroid depth and width parameters	Penny Haxell Independent tra	Penny Haxell Independent transversals, topology and resource allocation	Thomas Rothvoss The subspace flatne	Thomas Rothvoss The subspace flatness conjecture and faster integer programming
11:05-11:50am	Cynthia Vinzan i Log-concavity in	Cynthia Vinzant Log-concavity in matroids and beyond	Michel Goema From Ford-Fulk	Michel Goemans From Ford-Fulkerson's network flows to information or linking flows	Sam Fiorini Integer program	Sam Fiorini Integer programs with nearly totally unimodular matrices: the cographic case
	12-2:30pm	Lunch	12-2pm	Lunch	12-2pm	Lunch
		Session chair: Chaitanya Swamy		Session chair: Chaitanya Swamy		Session chair: Luke Postle
	2:30-3:15pm	Ola Svensson Advancements in online edge coloring algorithms (Chair: Swamy)	2-2:45pm	Éva Tardos Stability and learning in strategic games	2-2:45pm	Ken-ichi Kawarabayashi Three-edge-coloring projective planar cubic graphs: A generalization of the Four Color Theorem
	3:20-3:50pm	Break	2:55-3:40pm	Satoru Iwata Finding maximum edge-disjoint paths between multiple terminals	2:55-3:30pm	Break
		Session chair: Jane Gao				Session chair: Kanstanstin Pashkovich
	3:50-4:35pm	Jinyoung Park When sunflowers meet thresholds	3:50-4:15pm	Break	3:30-4:15pm	(Special Tutte Colloquium) Paul Seymour Nearly-linear stable sets
	4:45-5:30pm	Jim Geelen Average plane size	4:15-6:05pm	Session chair: Bertrand Guenin Lightning Talks	4:25-4:30pm	Closing remarks
	6-8:30pm	Reception (QNC atrium)	6:30-7pm 7-9pm	Poster session (Fed Hall) Banquet (Fed Hall)	4:30-6pm	Tutte Colloquium Reception

