PIMS Summer School on Explicit Methods for Abelian Varieties

June 16-18, 2016 University of Calgary

www.pims.math.ca/scientific-event/160616-ssemav people.ucalgary.ca/~rscheidl/SummerSchool/

Speakers

Jennifer Balakrishnan, University of Oxford Lassina Dembélé, University of Warwick Jan Steffen Müller, University of Oldenburg Rachel Pries, Colorado State University

Sponsored by



Schedule

Thursday	v. June	16

8:50-9:00	ST 139	Opening remarks
9:00-9:50	ST 139	Rachel Pries (Lecture 1)
10:00-10:50	ST 139	Steffen Müller (Lecture 1)
10:50-11:15	MS 461	Coffee break
11:15-12:05	ST 139	Jennifer Balakrishnan (Lecture 1)
12:05-14:00		Lunch break
14:00-14:50	ST 139	Lassina Dembélé (Lecture 1)
15:00-16:00	MS 427, 431, 452, 478, 522	Problems
16:00-16:30	MS 461	Coffee break
16:30-18:00	MS 427, 431, 452, 478, 522	Problems

Friday, June 17

9:00-9:50	ST 139	Rachel Pries (Lecture 2)
10:00-10:50	ST 139	Steffen Müller (Lecture 2)
10:50-11:15	MS 431	Coffee break
11:15-12:05	ST 139	Jennifer Balakrishnan (Lecture 2)
12:05-14:00		Lunch break
14:00-14:50	ST 139	Lassina Dembélé (Lecture 2)
15:00-16:00	MS 427, 431, 452, 478, 522	Problems
16:00-16:30	MS 461	Coffee break
16:30-18:00	$MS\ 427,\ 431,\ 452,\ 478,\ 522$	Problems

Saturday, June 18

9:00-12:00 To be determined (More problems? Participant presentations? Suggestions welcome.)

Local Information

Venue

All events take place on the University of Calgary main campus. Lectures take place in Room 139 of the Science Theatre Complex (ST 139). Coffee breaks take place in room 461 of the Mathematical Sciences Building (MS 461, also known as the Math Lounge). For problem solving sessions and other work, rooms MS 427, MS 431, MS 452, MS 478 on the fourth floor of Math Sciences and room MS 522 on the fifth floor of Math Sciences are available from 8:30 am to 6:00 pm.

ST 139 and MS 431 have AV equipment; MS 427 is a classroom with a blackboard, and MS 452, MS 478, MS 522 are meeting rooms with TV screens that can support laptop and tablet hook-up. Participants may also feel free to hang out in the Math Lounge during the day until 4:30 pm. Consult the U of C Interactive Room Finder at http://ucmapspro.ucalgary.ca/RoomFinder/to locate these rooms. A campus map can be found at http://ucmaps.ucalgary.ca/PublicFiles/CurrentMaps/CampusMap_MainCampus_Letter.pdf.

Public Transportation

The train connects campus with downtown. To get to downtown from the University, take the Red Line (Route 201) southbound, direction Somerset–Bridlewood; for the reverse direction take the

northbound train, direction Tuscany. Trains run every 3–5 minutes during peak times and every 5–15 minutes otherwise. A number of city busses also go to the main campus.

A single adult fare is \$3.15, payable by cash, debit or credit card at any ticket machine and at most convenience and grocery stores; the latter also sell booklets of 10 tickets for \$31.50. Note that tickets cannot be purchased on the train. Prepaid tickets must be validated at a ticket machine at any train station; they cannot be validated on the train. Tickets purchased from a ticket machine require no validation.

For more information, visit the the Calgary Transit website at http://www.calgarytransit.com.

Internet

The University of Calgary offers access to Eduroam.

Alternatively, conference participants can gain access the *airuc-guest* wireless network for up to 72 hours as follows. Connect to airuc-guest on your device. Upon opening a new browser window, you will be redirected to a registration page. The easiest way to register is via a valid email address and/or an SMS-enabled phone number. With that option, you will be sent a password via both email and SMS text message upon successful registration on the airuc-guest portal. Visitors without access to email or an SMS enabled phone number will need to contact the IT Support Centre by phone at 403-220-5555 or visit in person on the 7th floor of the Mathematical Sciences Building (MS 773), open Mon–Fri 8:00 am–5:00 pm and Sat/Sun 10:00 am–2:00 pm. After expiry, you can register again for another 72-hour access period to the airuc-guest wireless network.

Food

Summer school participants are asked to make their own meal arrangements.

A variety of fast food options are available on the main and lower levels of the Student Union (MacEwan Student Centre) and at other locations across campus. There are also three pubs in MacEwan that are open during the day: the *Den* on lower level, the *Black Lounge* on the main level (http://den.su.ucalgary.ca/), and the *Last Defense Lounge* on the upper level (http://www.lastdefencelounge.ca/).

The Bistro at Hotel Alma (http://www.hotelalma.ca/bistro_alma) serves breakfast, lunch and light dinner fare. Coffee shops can be found all across campus, including *Good Earth Coffeehouse* in the Taylor Family Digital Library and the ICT Building, *Starbucks* in the basement of MacEwan Hall, and other coffee shops on the main floor of MacEwan Hall and the Science Theatre area near the Social Sciences complex.

There are a number of restaurants and two Irish pubs at Brentwood Village Shopping Centre, a 15-minute walk north of campus, at Brentwood Road and 32nd Avenue NW. Stadium Shopping Centre, a 15-minute walk south of campus at Uxbridge Drive and 16th Avenue NW, has fast food options, an Irish pub and two restaurants: the Keg Steakhouse & Bar (https://www.kegsteakhouse.com/locations/stadium-keg/) and the Redwater Rustic Grille (http://redwatergrille.com/stadium/).

Kensington Village (http://www.visitkensington.com/), around the intersection of Kensington Road and 10th Street NW just north of the Bow River, has a large number of restaurants and shops. It can be reached by train from campus and from Motel Village (Red Line no. 201, southbound direction Somerset–Bridlewood, get off at the Sunnyside station).

Stephens Avenue Mall is a pedestrian mall downtown, located on 8th Avenue SW between 4th Street SW and 1st Street SE. It has a variety of restaurants and pubs, many with outdoor patios.

It is easily reachable by train: take the Red Line no. 201 southbound, get off anywhere along 7th Avenue SW between 4th Street SW and 1st Street SE, and walk one block south. If you have a car, note that downtown parking is expensive during the day, but free on weekdays after 6 pm and on Sundays.

Recreation and Sightseeing

The U of C Athletics facilities include a swimming pool, gym, skating rink and racquet centre; see http://www.ucalgary.ca/activeliving/. Day passes are available; for user and rental fees, consult http://www.ucalgary.ca/activeliving/memberships/passes-services.

The official Tourism Calgary website at http://www.visitcalgary.com/ contains a plethora of information on things to do in Calgary. Check out the Calgary Attractions website at http://www.calgaryattractions.com/ which also has discount coupons. More information about attractions throughout the province of Alberta can be found on the Travel Alberta website at https://travelalberta.com.

Below is a (by no means complete) list of Calgary's main attractions:

- Glenbow Museum (http://www.glenbow.org/)
- Calgary Tower (http://www.calgarytower.com/)
- Shops and restaurants at Stephens Avenue Mall (located on 8th Avenue SW between 4th Street SW and 1st Street SE)
- Shops and restaurants in Kensington Village (located around the intersection of Kensington Road and $10^{\rm th}$ Street NW)
- Eau Claire Market (http://www.eauclairemarket.com/)
- Heritage Park (http://www.heritagepark.ca/)
- Fort Calgary (http://www.fortcalgary.com/)
- Calgary Zoo (http://www.calgaryzoo.com/)
- Canada Olympic Park (http://www.winsport.ca/activities/summer.cfm)
- Telus Spark Science Centre (http://www.sparkscience.ca/)
- Calaway Park (amusement park for kids) http://www.calawaypark.com/

The gorgeous Canadian Rockies, espcially Banff National Park (http://www.pc.gc.ca/eng/pn-np/ab/banff/index.aspx, http://banffnationalpark.com/) and Kananaskis Country (http://www.albertaparks.ca/kananaskis-country.aspx) offer unlimited hiking and other outdoor activities. Park fees apply for entry into Banff National Park (http://www.pc.gc.ca/pn-np/ab/banff/visit/tarifs-fees_e.asp?park=1), while admission to the provincial parks in K-Country is free. For your safety, please heed all park advisories, including warnings about bears.

The towns of *Canmore*, *Banff* and *Lake Louise* are all located in the Rocky Mountains, on the Trans-Canada Highway (16th Avenue NW) at respective approximate distances of 100 km, 120 km, and 180 km frm campus. Canmore is located just outside Banff National Park, Banff and Lake Louise are located inside the park.

If you like dinosaurs — and who doesn't! — well worth a visit is the spectacular *Royal Tyrrell Museum* (http://www.tyrrellmuseum.com/), located in Drumheller, about 140 km northeast of Calgary. It is open seven days a week until 9 pm.

The Bar U Ranch National Historic Site (http://www.pc.gc.ca/eng/lhn-nhs/ab/baru/visit/visit1.aspx) is located just off Highway 22, approximately 95 km south of Calgary. It is on the way to the remote Waterton Lakes National Park (http://www.pc.gc.ca/eng/pn-np/ab/waterton/index.aspx), 290 km south of Calgary, at the Canada-USA border.