

GRADUATE STUDIES INFORMATION SESSION

10/26/2020

Please have your microphones muted.

Thank you!



UNIVERSITY OF
WATERLOO

FACULTY OF
MATHEMATICS



AGENDA

- Welcome from Adam Kolkiewicz, Associate Dean of Graduate Studies
- Graduate student life at Waterloo
- Graduate studies trivia
- Department/school/program representative introductions
- Breakout sessions
- Wrap-up

WELCOME

Adam Kolkiewicz, Associate Dean, Graduate Studies

UNIVERSITY OF WATERLOO FACULTY OF MATHEMATICS

- One of the largest in the world!
- 7,484 undergraduate and 1,113 graduate student (2019)
- 285 full-time faculty
- 41,000+ alumni (2019)
- 500+ courses in mathematics, statistics, and computer science
- \$29+ million in research funding in 2019/20



DEPARTMENTS AND SCHOOLS

Applied Mathematics

Researchers are at the forefront of several exciting research areas including Control and Dynamical System, Fluid Mechanics, Mathematical Medicine and Biology, Mathematical Physics and Scientific Computing.

Combinatorics and Optimization

Our department was the first of its kind in the world. Today, our researchers are working in algebraic combinatorics, continuous optimization, cryptography, discrete optimization, graph theory and quantum computing.

David R. Cheriton School of Computer Science

Our 90+ professors are engaging in research on an incredible range of computer science and information systems topics. About 24% of all university spin-off companies in Canada are from the University of Waterloo and computer science plays a prominent role in many of these.

Pure Mathematics

An exciting, active research environment focused on core disciplines within Pure Mathematics, including algebra, analysis, geometry and topology, mathematical logic and number theory.

Statistics and Actuarial Science

Our researchers are working in a variety of fields in statistics, probability, actuarial science and quantitative finance - from biostatistics and epidemiology to pensions and social security, and everything in between.

GRADUATE PROGRAMS

- Each of the 5 units offer **specialized programs** in their discipline
- The Faculty of Math also offers a number of programs:

Interdisciplinary programs

- Master of Computational Mathematics
- Collaborative program in Quantum Information
- Master of Data Science and Artificial Intelligence
- Master of Mathematics in Data Science

Professional programs

- Master of Mathematics for Teachers
- Master of Quantitative Finance
- Master of Actuarial Science



GRADUATE STUDENT LIFE

Aiden Huffman, Chair, Math Graduate Student Association

WHO ARE WE?

- Founded in 2016
- Represent the graduate students of the Faculty of Mathematics in the Faculty and in the broader University Community.
- Promote an interdisciplinary culture of social and intellectual interaction among students within the faculty.
- Coordinate events and activities that will benefit our members.



SOME OF OUR PAST EVENTS

Workshops and Professional Development:

- Sexism Response Workshop
- More Feet on the Ground Mental Health Training
- Alumni Panel

Social Events:

- Welcome Back Event
- Coffee and Donut Days
- Online Trivia
- Jackbox

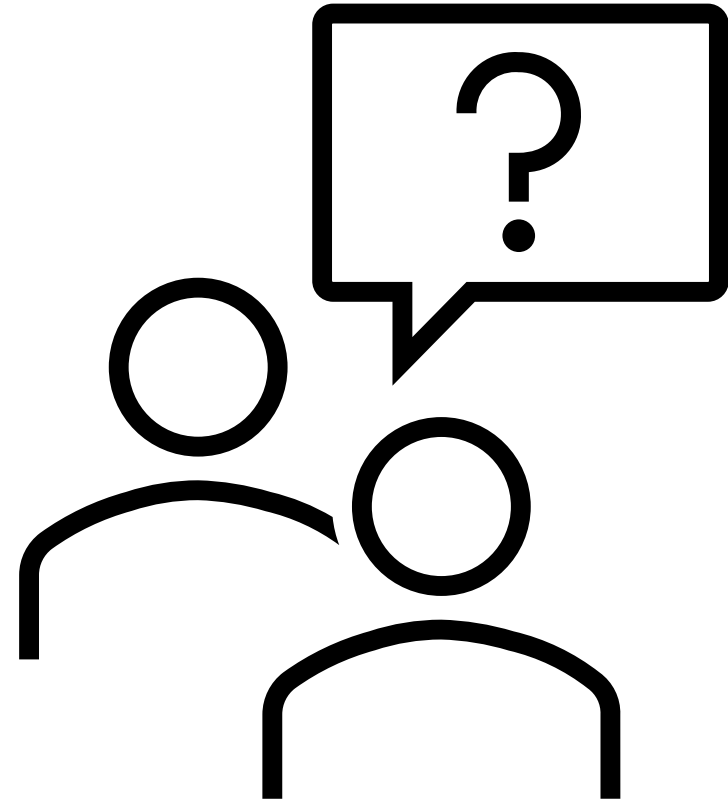


GRAD STUDIES AT UWATERLOO

Things you'll be doing...

1. Learning
2. Teaching
3. Research

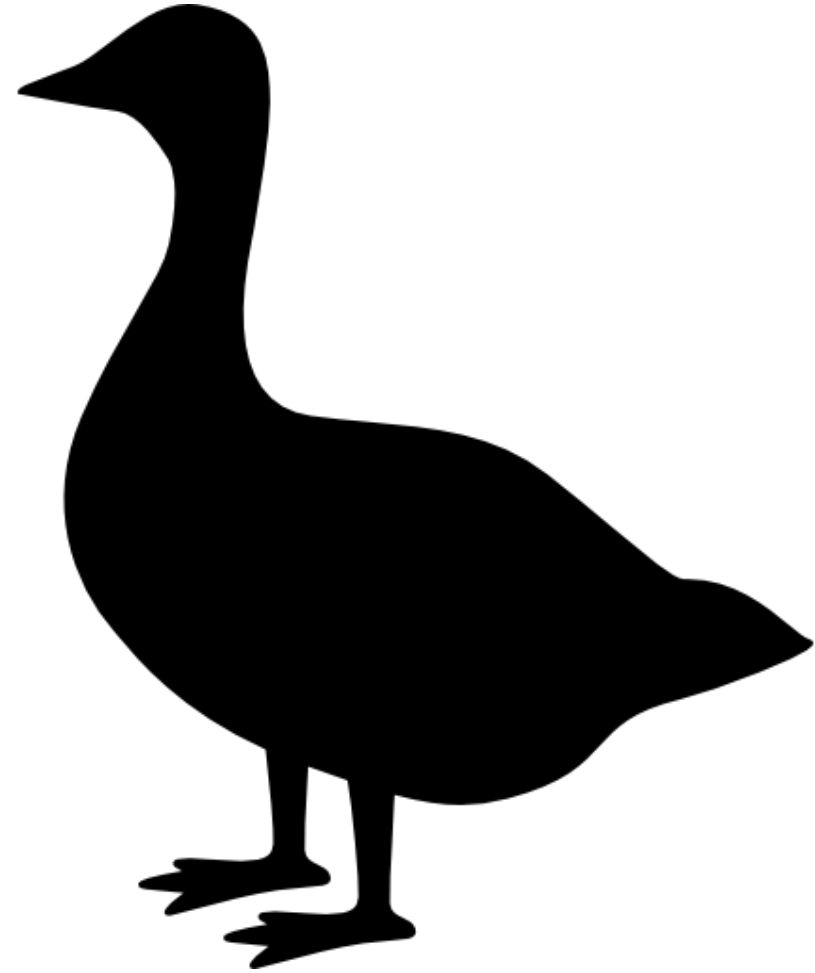
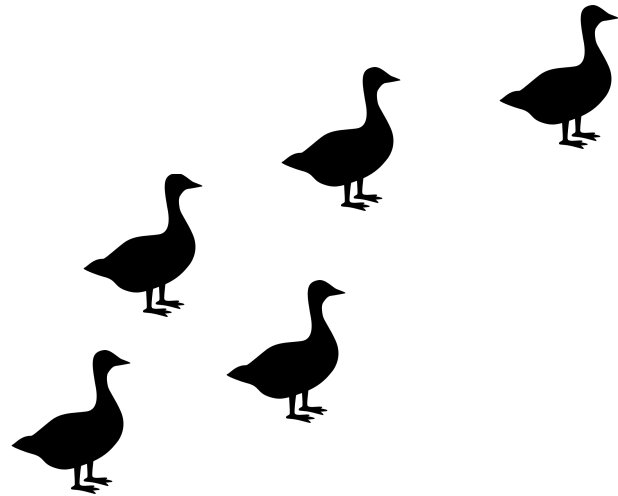
Meeting geese...



GEESE

They have a website:

<https://goose-watch.uwaterloo.ca/>



COMMUNITY

Meet people with specialized knowledge and interests in all sorts of fields!

- Grad House
- Faculty/Department events
- GSA events

PAC/SLC EXPANSION



OPPORTUNITIES

Work

- GradVenture
- Department Seminars/Colloquia
- Virtual Concept

Play

- Games on Tap (Boardgame Café/Bar)
- Waterloo Park
- Algonquin National Park
- Kitchener Market

Eat

- KEN Sushi House
- Mel's Diner
- Sweet Dreams Tea Shop
- Many more...



GRADUATE STUDIES TRIVIA

Zoom polls

TRIVIA QUESTIONS AND ANSWERS

1. True or False: We are the only dedicated Faculty of Mathematics in North America.
 - **True.** This means that you'll have the opportunity to focus your studies, with unique Master of Mathematics (MMath) and PhD programs offered by each of our departments and school, and several interdisciplinary and course-based professional master's programs.
2. Which school(s)/department(s)/program belong in the Faculty of Mathematics?
 - Applied Mathematics
 - Combinatorics & Optimization
 - Computational Math
 - Computer Science
 - Data Science
 - Pure Mathematics
 - Statistics and Actuarial Science



TRIVIA QUESTIONS AND ANSWERS

3. The University's office of Graduate Studies and Postdoctoral affairs offers a central hub of professional development resources for graduate students called...
 - **GRADventure** is a central hub of professional development resources designed for grad students at Waterloo. In addition to resources, they also provide special event listings and details about upcoming workshops.
4. True or False: The intellectual property of Waterloo researchers and graduate students is owned by the University of Waterloo.
 - **False.** Unlike at many universities, Waterloo researchers (including graduate students) own the rights to their intellectual property. The Waterloo Commercialization Office (WatCo) facilitates the commercial application of campus research for interested faculty and graduate students.
5. Waterloo is proud to have a large cohort of international graduate students. Today we have over 5,800 graduate students on campus, 40% of whom are international. How many countries do our international graduate students represent?
 - 84 countries

DEPARTMENT/SCHOOL/PROGRAM

Introductions

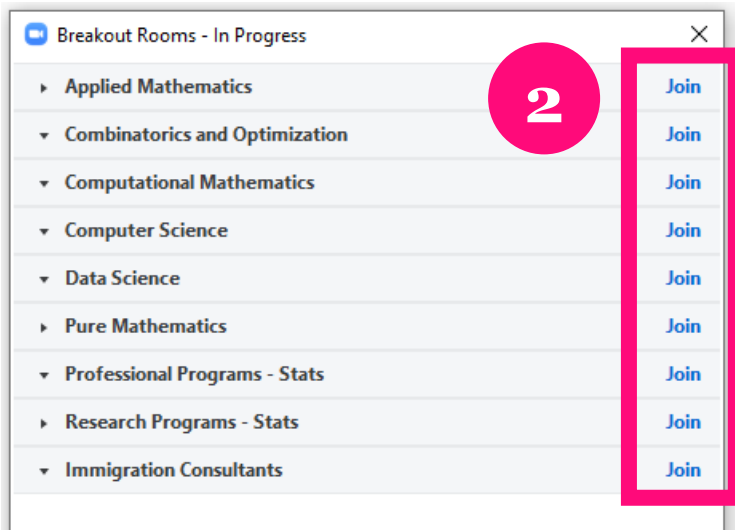
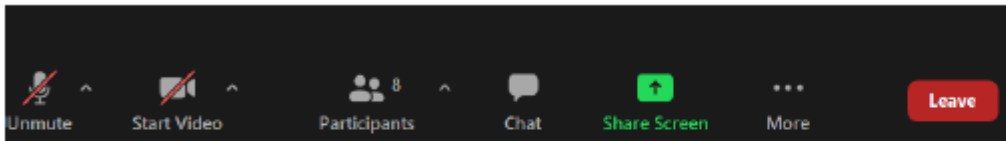
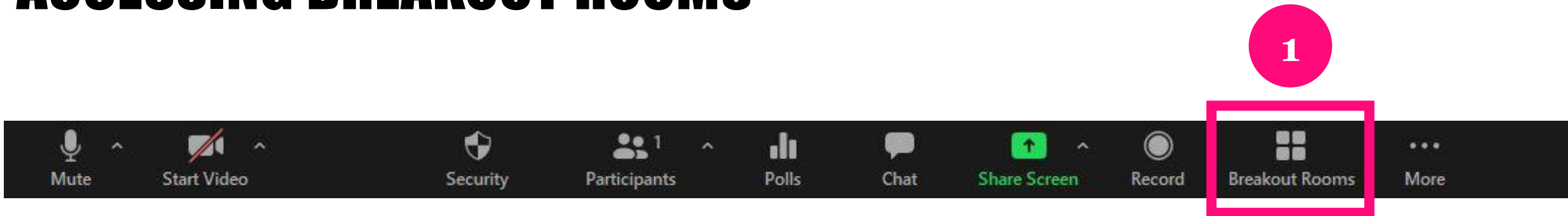
INTRODUCTIONS

1. Applied Mathematics
2. Combinatorics and Optimization
3. Computational Mathematics
4. Computer Science
5. Data Science
6. Pure Mathematics
7. Statistics and Actuarial Science

BREAKOUT SESSIONS

Things to keep in mind

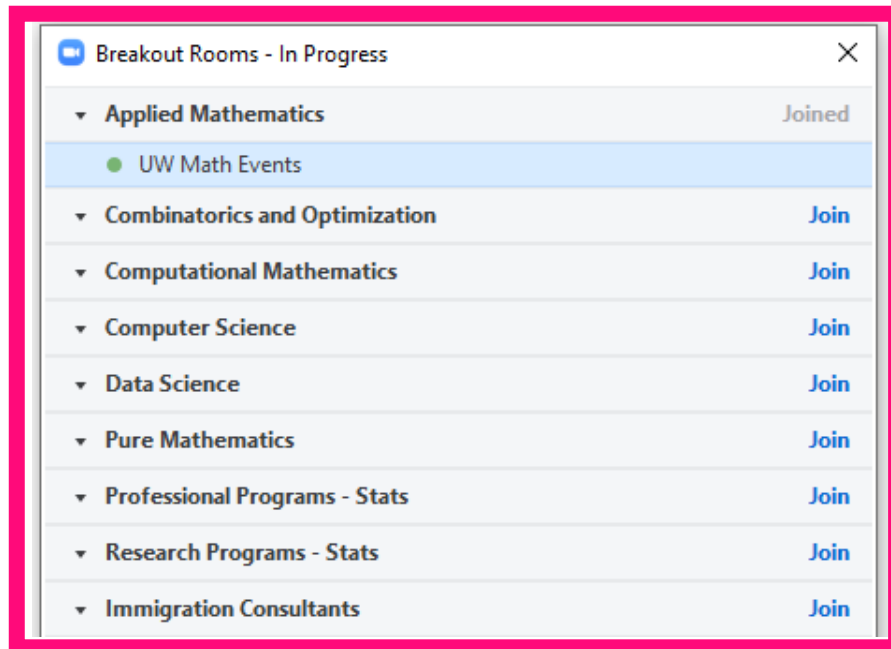
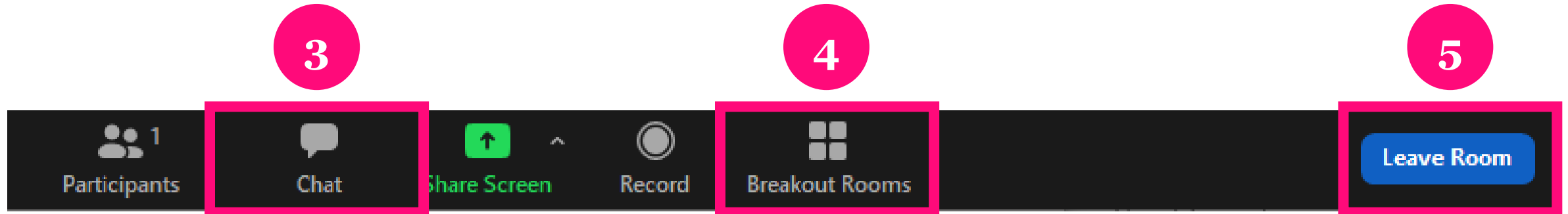
ACCESSING BREAKOUT ROOMS



If you're not in full screen, Breakout Rooms icon is under the More ... icon

- 1 Access breakout rooms
- 2 Join room

MANAGING BREAKOUT ROOMS



- 3 Chat – “Department: Question”
- 4 Move between breakout rooms
- 5 Leave to go back to main room

CHECK FOR UPDATES

The screenshot shows the Zoom desktop application interface. At the top, there is a navigation bar with icons for Home, Chat, Meetings, and Contacts, along with a search bar and a user profile icon (BM) highlighted with a red box. Below the navigation bar, there are four main action buttons: New Meeting (orange), Join (blue), Schedule (blue), and Share screen (blue). The central area displays the current time, 12:06 PM, and the date, Thursday, October 8, 2020. Below this, it says "No upcoming meetings today". On the right side, the user profile menu is open, showing the user's name, email address, and various settings options. The "Check for Updates" option is highlighted with a red box.

BREAKOUT SESSION INFORMATION

Department/School/Program	Representatives	Presentation Times
Applied Mathematics	Michael Waite, Samantha Sooriyabandara, Chérisse Mike	11:40 A.M.
Combinatorics and Optimization	Karen Yeats, Melissa Cambridge, Evelyne Smith-Roberge (grad student), Maxwell Levit (grad student)	-
Computational Mathematics	Hans De Sterck, Ryan Browne, Chérisse Mike	11:10 A.M.
Computer Science	Eric Schost, Monique Bevan, Onkar Singh Sehmi	11:20 A.M.
Data Science	Yuying Li, Mu Zhu, Ryan McGuinness	11:30 A.M.
Pure Mathematics	Barbara Csima	-
Statistics and Actuarial Science <i>Professional Programs</i>	Shoja'eddin Chenouri, Helen Chen, David Saunders, Diana Skrzydlo	-
Statistics and Actuarial Science <i>Research Programs</i>	Shoja'eddin Chenouri, Lisa Baxter, Mary Lou Dufton	-
Immigration Consultants	Clint MacPhee, Stefanie Heinbuch	-



WRAP-UP

UPCOMING EVENTS

Graduate Studies and Postdoctoral Affairs (GSPA)

Funding your education | October 29, 2020

Writing your personal statement | November 18, 2020

Preparing your application | November 25, 2020

Register at uwaterloo.ca/graduate-studies-postdoctoral-affairs/events.

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