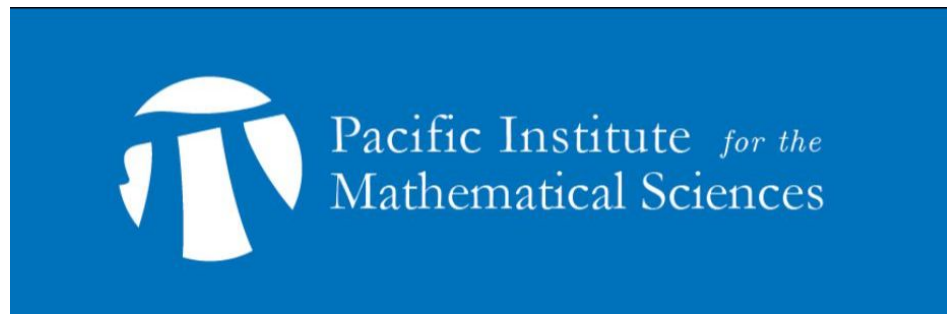


[View this email in your browser](#)



PIMS MONTHLY CONNECTION | **NOVEMBER 2023**



## Hello from PIMS

Welcome to the November edition of the PIMS Newsletter. This month, we are beginning to feel the air turn crisper, and the days getting shorter. However, seminars and events continue to take place and we have a plethora of opportunities open across the PIMS network.

PIMS, together with UBC, will co-host their annual [Math Job Forum](#). This online event will take place on **October 31st**. The annual forum offers valuable insights and is designed to help graduate students and postdoctoral fellows in Mathematics and related areas with their job searches. The session is divided into two parts: short presentations from our panel, followed by a discussion. Join the meeting through the event details provided below.

A reminder that the [CRM-Fields-PIMS Prize](#) Call for nominations **closes on November 1st, 2023**. The prize is awarded jointly by the Centre de recherches mathématiques (CRM), the Fields Institute, and the Pacific Institute for the Mathematical Sciences (PIMS). The winner receives a monetary award and an invitation to present a lecture at each institute within one year after the award is announced. **Apply before the deadline!**

The [PIMS Postdoctoral Competition](#) is open until December 1st, 2023. We invite nominations of outstanding early-career researchers in the mathematical sciences for postdoctoral fellowships beginning in the academic year 2024-2025. To qualify for the competition, candidates must be nominated by a faculty member or department affiliated with PIMS.

Don't forget to join us on [November 16th, 2023, for the PIMS Network-Wide Colloquium](#) with Kristin Lauter (META) and to tune in to our PIMS Emergent Research Seminar Series.

### **Important dates:**

**October 31:** PIMS-UBC Math Job Forum for Postdoctoral Fellows and Graduate Students.

**November 1:** Deadline for nominations for the CRM-Fields-PIMS Prize.

**November 5:** Deadline for [VXML Student and Graduate Mentors](#).

**November 20:** Application deadline for 2023 M2PI Organizing Committee.

**December 1:** Deadline for applications for the PIMS Postdoctoral Competition.

**April 15, 2024:** Deadline for Applications for [PIMS/BIRS Team Up!](#)

See below for more details on this month's news, featured events, and media.

Sincerely,  
The PIMS Team

---

## PIMS NEWS



### 2023 PIMS SITE DIRECTORS MEETING UPDATE

One of the many facets that make PIMS unique is the distributed nature of the institution. PIMS has 10 full members and 3 affiliate members spread across 4 Canadian provinces and 1 American state. Each month, site directors meet regularly to discuss and review operations at PIMS sites and across the network. Often meeting online, the site directors met at the University of Victoria on October 26th. (Shown above, left to right: *Anthony Quas*, UVictoria; *Chris Soteris*, USaskatchewan; *Razvan Fetecau*, SFU; *Kristine Bauer*, Co-Director Industry; *Ozgur Yilmaz*, PIMS Director; *Thomas Hillen*, UAlberta; *Stephanie Portet*, UManitoba and **Allen Herman**, URegina. (Not included: *Wenyuan Liao*, UCalgary; *Brian Marcus*, UBC; *Nathan Ng*, ULethbridge; *Soumik Pal* (Interim), UWashington).

The October Site Directors meeting coincided with the Fall meeting of the PIMS Board of Directors and was a chance for the PIMS executive leadership to share network-wide developments with the PIMS Board.

(PIMS Member Universities & Affiliates\*: Simon Fraser University, University of Alberta, University of British Columbia, University of Calgary, University of Lethbridge, University of Manitoba, University of Regina, University of Saskatchewan, University of Victoria, University of Washington, \*Portland State University, \*University of Northern British Columbia, \*Athabasca University)

---

## NETWORK






## 2023 PIMS-UBC MATH JOB FORUM

FOR POSTDOCTORAL FELLOWS & GRADUATE STUDENTS IN THE MATHEMATICAL SCIENCES




**Tuesday, October 31**  
**12.30pm PT**  
**On Zoom!**

<https://www.pims.math.ca/scientific-event/231031-pumjpfqs>

Join us! The PIMS-UBC annual Forum returns to help graduate students and postdoctoral fellows in Mathematics and related areas (Computer Science, Statistics, Physics, Data Science, Engineering, etc.) with their job searches in the mathematical sciences.

**Speakers**  
 Antoine Cerfon (Type One Energy), Dan Coombs (UBC), Dagan Karp (Harvey Mudd College), Vanessa Radzinski (University of the Fraser Valley), Ozgur Yilmaz (Director, PIMS).

## 2023 PIMS-UBC Math Job Forum for Postdoctoral Fellows and Graduate Students.

**October 31, 2023: Online**

The PIMS-UBC Math Job Forum is an annual forum to help graduate students and postdoctoral fellows in Mathematics and related areas with their job searches. The session is divided in two parts: short presentations from our panel followed by a discussion. Learn the secrets of writing an effective research statement, developing an outstanding CV, and giving a winning job talk. We will address questions like: Who do I ask for recommendation letters? What kind of jobs should I apply for? What can I do to maximize my chances of success?

Join us on October 31st, 2023 at 12.30 PM Pacific Time.

[Register for Event](#)



**2024 CRM-FIELDS-PIMS PRIZE**

[nominations@crm.umontreal.ca](mailto:nominations@crm.umontreal.ca)

**NOMINATIONS DEADLINE:**

**NOV 01 2023**

 Nassif Ghoussoub, 2019
  Andrew Granville, 2021

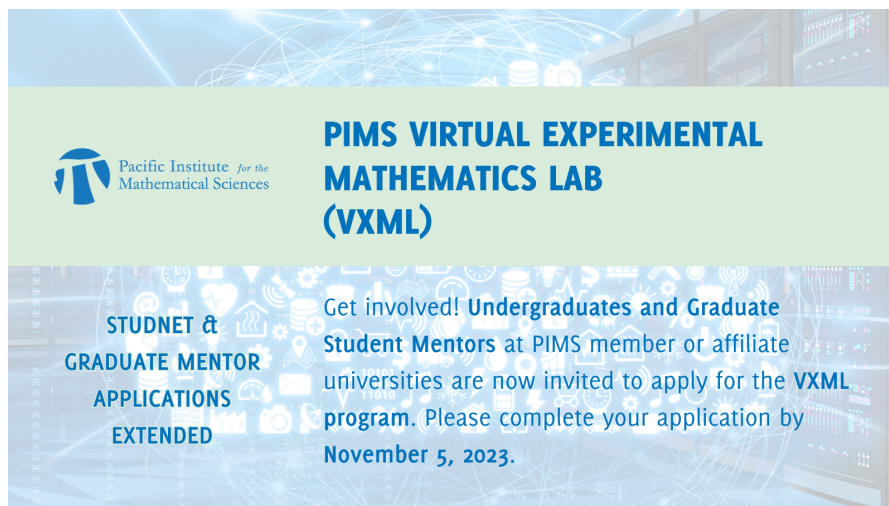
 Bálint Virág, 2022
  Catherine Sulem, 2020
  Christian Genest, 2023


**DEADLINE: Nominations for the 2024 CRM-Fields-PIMS Prize.**

prize, awarded in recognition of exceptional research achievement in the mathematical sciences. The candidate's research should have been conducted primarily in Canada or in affiliation with a Canadian university. The prize is awarded jointly by the three Canadian mathematics institutes. The winner receives a monetary award and an invitation to present a lecture at each institute within one year after the award is announced.

As part of our commitment to equality, we particularly encourage nominations of women and of members of underrepresented groups. **The deadline to apply is November 1st 2023; Please submit to [nominations@crm.umontreal.ca](mailto:nominations@crm.umontreal.ca).**

[View the Award Criteria and Guidelines](#)



 Pacific Institute *for the* Mathematical Sciences

## PIMS VIRTUAL EXPERIMENTAL MATHEMATICS LAB (VXML)

**STUDNET & GRADUATE MENTOR APPLICATIONS EXTENDED**

Get involved! **Undergraduates and Graduate Student Mentors** at PIMS member or affiliate universities are now invited to apply for the **VXML** program. Please complete your application by **November 5, 2023**.

## PIMS Virtual Experimental Mathematics Lab (VXML): Application Deadline for Students and Graduate Mentors Extended to November 5, 2023

The [PIMS Virtual Experimental Mathematics Lab \(VXML\)](#) brings together world-leading faculty members, postdocs, graduate students and undergraduate students to work on exciting research problems in mathematics. Project teams from throughout the PIMS network work together to tackle challenging research problems through experimental, computational and visual mathematics, showcasing mathematics as a creative discipline.

Research problems are proposed by a faculty member or postdoc at a PIMS member (or affiliate member) university, and a project team consisting of the mentor, a graduate student and 2-4 undergraduate students are formed to work on the problem (we encourage teams that integrate members from multiple PIMS sites). Teams commit 6-8 hours per week to work on the project and to meet to discuss their discoveries. Students will use a mixture of computational tools such as CoCalc (Sage Math Cloud), to work and collaborate. **Applications for students and graduate mentors close on November 5, 2023.**

[Apply Now!](#)



## DEADLINE: PIMS Postdoctoral Nominations.

PIMS invites nominations of outstanding young researchers in the mathematical sciences for postdoctoral fellowships beginning in the academic year 2024-2025. Candidates must be nominated by a scientist or department affiliated with PIMS. These fellowships are intended to supplement the support provided by the sponsor, and are tenable at any of the PIMS Canadian member universities: the University of Alberta, the University of British Columbia, the University of Calgary, the University of Lethbridge, the University of Manitoba, the University of Regina, the University of Saskatchewan, Simon Fraser University, and the University of Victoria.

Award decisions are made by the PIMS PDF Review Panel, and are based on the scientific qualifications of the candidate, demonstrated scientific leadership, the fit between the research interests of the candidate and those of the sponsor, and adequacy of matching funds. We strongly encourage people from historically underrepresented groups to apply for these positions. **Nominations close on December 1st, 2023.**

[See Nomination Details](#)



Pacific Institute for the Mathematical Sciences

### OPEN CALL! M2PI Organizing Committee

PIMS is excited to announce an open call for individuals interested in joining the Organizing Committee for the **Math to Power Industry 2024 workshop**. We are seeking enthusiastic and dedicated members of the PIMS Network to join the dedicated team which has made this event a success since 2020.

<https://m2pi.ca/#organizers>



## OPEN CALL: Organizing Committee Members: Math to Power Industry 2023.

PIMS invites nominations for committee members to the Math to Power Industry 2023 Committee. If you are passionate about fostering connections between the emerging generation

apply to join the Organizing Committee.

Committee members will play a crucial role in project development, mentorship and industry relations, event logistics and promotion, and participant engagement. To express your interest, please email us at [industry@pims.math.ca](mailto:industry@pims.math.ca) by **Monday, November 20, 2023** with your name, a brief statement of your background and interests, and how you would like to contribute to the Math to Power Industry 2023 event.

[See Details Here](#)



## PIMS Network Wide Courses: Spring 2024 Enrolment.

Fourteen new PIMS Network-Wide Graduate Courses have been approved for Spring 2024 term, and will soon be accepting registrations through the [Western Deans Agreement](#). Graduate students in your department(s) who may be interested in one or more of the courses offered below are welcome to apply.

- **Algebraic and probabilistic techniques in combinatorics**, *Bojan Mohar (Simon Fraser University)*
- **Algebraic Number Theory**, *Lior Silberman (University of British Columbia)*
- **Ergodic Theory**, *Anthony Quas (University of Victoria)*
- **Hodge theory, Deligne cohomology and algebraic cycles**, *James D. Lewis (University of Alberta)*
- **Hyperbolic Systems of Conservation Laws**, *Thomas Hillen (University of Alberta)*
- **The geometry and arithmetic of schemes**, *Clifton Cunningham (University of Calgary)*
- **Topics in harmonic analysis: Fourier restriction and decoupling**, *Joshua Zahl (University of British Columbia)*

Please take note that registration deadlines may be up to six or eight weeks in advance of the course start date. We encourage students to check the details of courses they are interested in and contact the course instructors as soon as possible.



## **PIMS-BIRS TeamUp!: Applications now Open for the 2024-2025 period.**

The PIMS-BIRS TeamUp! Program is now open for applications for the 2024-2025 period. This program provides support for groups of 2-6 researchers to spend two weeks working together at world class research facilities such as the Banff International Research Station (BIRS) or the Kelowna BIRS site. It is specifically targeted at those whose research program may have been impacted by obstacles such as family obligations, professional isolation, access to funding etc. and features program benefits designed to help address these challenges. We strongly encourage applications from women, gender-expansive individuals, Indigenous scholars, persons with visible/invisible disabilities, and other minoritized groups. The program is also open to early-career researchers and those with limited resources.

**Applications are open now and will close on April 15th, 2024.**

[See Details Here](#)

---

## **FEATURE EVENTS**



## Pacific Northwest Probability Seminar.

### November 4, 2023: University of Washington

Northwest Probability Seminars are mini-conferences held at the University of Washington and organized in collaboration with the Oregon State University, the University of British Columbia and the University of Oregon. There is no registration fee.

The **Birnbaum Lecture in Probability** will be delivered by [Robin Pemantle](#) (University of Pennsylvania) in 2023. **Other speakers include:** Stefan Steinerberger (University of Washington), Nick Marshall (Oregon State University), and Lucas Teyssier (University of British Columbia).

The Twenty Third Northwest Probability Seminar is supported by the [University of Oregon](#), Pacific Institute for the Mathematical Sciences (PIMS), [Baidu](#), [University of Washington](#) (Friends of Mathematics Fund), and [Milliman Fund](#).

[More Seminar Details](#)



HOSTED BY  
UNIVERSITY OF MANITOBANOVEMBER 16, 2023  
WINNIPEG, MB & ONLINE

# ASSOCIATION FOR WOMEN IN MATHEMATICS (AWM) SYMPOSIUM AT THE UNIVERSITY OF MANITOBA

The UManitoba student chapter of the Association for Women in Mathematics (AWM) will be hosting a symposium on November 16, 2023. This hybrid symposium will take place in Armes 205 at the University of Manitoba Fort Garry campus in Winnipeg, Manitoba. The symposium aims to celebrate and connect women, gender-diverse folx and allies from a wide range of mathematical disciplines.

TALK AND POSTER PRESENTATION DEADLINE | OCTOBER 15

REGISTRATION DEADLINE | OCTOBER 31



Plenary Speaker  
DR. KAREN MEAGHER  
University of Regina



Panelist  
DR. AVLEEN KAUR  
University of British  
Columbia



Panelist  
DR. AYUSH KUMAR  
University of Manitoba



Panelist  
HERMIE MONTERDE  
University of Manitoba

For more information visit:  
<https://www.pims.math.ca/scientific-event/231116-uawms>



UNIVERSITY  
OF MANITOBA



## Association for Women in Mathematics (AWM) Symposium.

**November 16, 2023: University of Manitoba**

The University of Manitoba student chapter of the Association for Women in Mathematics (AWM) will be hosting a symposium on November 16, 2023. This hybrid symposium will take place in Armes 205 at the University of Manitoba Fort Garry campus in Winnipeg, Manitoba.

The symposium aims to celebrate and connect women, gender-diverse folx and allies from a wide range of mathematical disciplines. The program will include a plenary talk from [Dr. Karen Meagher](#), a mathematics professor from the University of Regina and the current chair of the Canadian Mathematical Society Women in Mathematics Committee. **The deadline for registration is October 31st, 2023.**



**PIMS**  
**Network-Wide**  
**Colloquium Series** | 1.30pm Pacific | Online

Pacific Institute for the  
Mathematical Sciences

 **November 16**  
**KRISTIN LAUTER**

## PIMS Network Wide Colloquium: Kristin Lauter.

**November 16, 2023: Online**

**1:30 PM Pacific Time**

### **Speaker Biography:**

Kristin Lauter is an American mathematician and cryptographer whose research interest is broadly in application of number theory and algebraic geometry in cryptography. She is particularly known for her work in the area of elliptic curve cryptography. She was a researcher at Microsoft Research in Redmond, Washington, from 1999 - 2021, and the head of the Cryptography Group from 2008 - 2021; her group developed Microsoft SEAL. In April 2021, Lauter joined Facebook AI Research (FAIR) as the West Coast Head of Research Science. She became the President-Elect of the Association for Women in Mathematics in February 2014 and served as President from 2015 - 2017.

[Register Here](#)

## PIMS Emergent Research-PDF Seminar Series

**November 8, 22, and 29, 2023: Online**

The PIMS Emergent Research PDF Seminar Series officially returns for the 2023 Fall term! For the next two semesters, we will host 16 PIMS scholars from across our member universities. PIMS PDFs are amongst the top young researchers in Canada, and this is an excellent opportunity to learn about them and their work. Visit the PIMS [Mathtube](#) page to view their presentations.

The PIMS Postdoctoral Fellow Seminar

Nov 8, 2023 | 9:30am Pacific

Mathematical Sciences

## Water Waves: Instabilities



## Emergent Research:

The PIMS Postdoctoral Fellow Seminar

Nov 22, 2023 | 9:30am Pacific



Pacific Institute *for the*  
Mathematical Sciences



## Emergent Research:

The PIMS Postdoctoral Fellow Seminar

Nov 29, 2023 | 9:30am Pacific



Pacific Institute *for the*  
Mathematical Sciences



## Spaces of geodesic



[More Information about the PDF Seminar Series](#)

## Kantorovich Initiative Seminar: Giuseppe Savaré.

November 30, 2023: Online

10:00 AM Pacific Time



Mathematical Analysis at Bocconi University. His research interests are in Optimal transport, gradient flows and rate independent evolutions, variational methods for evolution problems, analysis in metric spaces, PDEs. Prof. Savaré was a Hans Fisher senior fellow at the Institute for Advanced Study (IAS) from 2019 to 2023. He was also a researcher of the CNR Institute for Applied Mathematics and Information Technologies "Enrico Magenes" in Pavia, Italy, from 1990 - 1998.

[More details here](#)

---

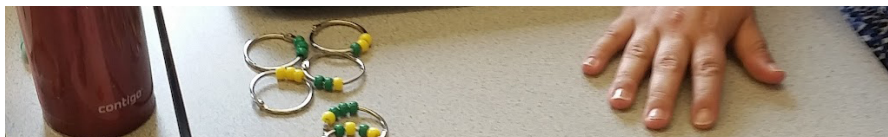
## View our calendars for more meetings and events

[Scientific Events](#)

---

## EDUCATION HIGHLIGHTS

### Math Circles for Elementary Schools Students at UBC.



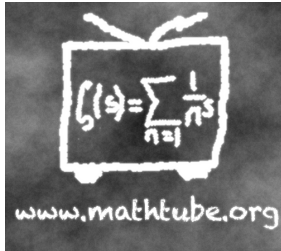
The Math Circles returns for the **Fall 2023** semester! Students of **grades 4 to 7** are invited to challenge and develop their thinking and creativity skills at the Math Circle Workshops. This is an enrichment program for students organized by Pacific Institute for the Mathematical Sciences.

The goal of these workshops is to convey to students the importance of mathematics in the real world as well as how much fun mathematics can be. We want to get the students excited about mathematics and to give them a setting that encourages them to become passionate about this subject.

The Math Circles Workshops will run on **October 16, 23 and 30, November 6, 20 and 27, and**

---

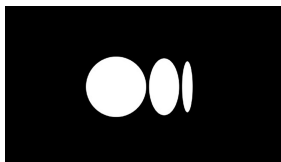
## MEDIA



### Missed a Lecture? Go to [Mathtube.Org](https://www.mathtube.org)

Proceedings for the [PIMS-ACTS event series](#) that took place this summer are now available for viewing!

Since 1996, PIMS has collected and maintained an archive of videos and lecture notes covering many areas of the mathematical sciences. If you missed any of the PIMS PDF Colloquium Lectures, visit [www.mathtube.org](https://www.mathtube.org) to see these and other archives.



### Read our feature stories on [Medium](#).

PIMS is happy to share our stories and short interviews with members of the PIMS Community. We are currently featuring our 2022 PDF Cohort as they speak at the PDF Seminar Series. Do you have an interesting profile from the PIMS Community that we should highlight? [Let us know!](#)

---

## ABOUT PIMS

**The Pacific Institute for the Mathematical Sciences (PIMS)** was created in 1996 to promote discovery, understanding, and awareness in the mathematical sciences. PIMS has expanded from the mathematics community of Alberta and British Columbia to include Washington State, Saskatchewan, and Manitoba. Our mandate is to promote research in and applications of the mathematical sciences, to facilitate the training of highly qualified personnel, to create an equitable, diverse and inclusive community, to enrich public awareness of and education in the mathematical sciences, and to create mathematical partnerships with similar organizations in other countries in the Pacific Rim. PIMS funds Collaborative Research Groups, Post-Doctoral Fellowships, and individual events on a competitive basis.

---

### We Want to Hear from You

Share your feedback on this month's newsletter and tell us what stories and news you would like to hear more of.

[Feedback](#)

### Your Support Makes a Difference

PIMS education and outreach programs touch countless educators, students, and Indigenous communities. Some of our activities include summer schools, mathematics contests and meetings for educators [Learn more](#)

[Donate to PIMS](#)

**Mailing address:**

Pacific Institute for the Mathematical Sciences  
The University of British Columbia  
4176-2207 Main Mall  
Vancouver, BC V6T 1Z4  
Canada

[unsubscribe from this list](#) [update subscription preferences](#)

We acknowledge with gratitude that PIMS central office is located on the unceded, traditional, and occupied territory of the Coast Salish peoples. This includes the territories of the xwməθkwəyəm (Musqueam), Skwxwú7mesh (Squamish), and Səlilwətaʔ/Selilwitlh (Tseil-Waututh) Nations.

[www.native-land.ca](http://www.native-land.ca)