



Pacific Institute *for the*  
Mathematical Sciences

PIMS MONTHLY CONNECTION | **June 2022**



## Hello from PIMS

We are excited to announce that **registration for the 2022 PRIMA Congress is now open!** Take advantage of the early rates by [registering](#) before July 31st! In the meantime, we continue to inch closer to the summer months and we are glad to see our PIMS member universities continuing to host in-person, hybrid, and online events. More details are outlined below.

The University of Washington is in full conference-mode and will host the **PIMS- IFDS- NSF Summer School on Optimal Transport**, the **Conference on Random Matrix Theory and Numerical Linear Algebra**, and the **Workshop on Combinatorial, Computational, and Applied Algebraic Geometry**. The [UWashington site page](#) has more details on upcoming events.

The PIMS CRG on Movement and Symmetry in Graphs will host the **2022 Prairie Discrete Mathematics Workshop** online. The online event is also open to interested combinatorists across the PIMS network. Registration details are available [here](#).

The University of Victoria will host the **Conference on New Developments in Four Dimension**. This conference will bring together experts in various aspects of four-dimensional topology including diffeomorphism groups of four-manifolds, construction and detection of exotic four-manifolds, and trisections of four-manifolds. Conference details can be found [here](#).

### [Upcoming Deadlines:](#)

- June 1 - [Math to Power Industry \(M2PI\): Last call for applications](#). (Online)
- Now through July 31- [PRIMA Early Registration deadline](#). (Vancouver - BC).
- Extended to Aug 31- [PRIMA Early Career Research Showcase: Poster and Short talk](#). (Vancouver - BC).

See below for more highlights on our educational activities at UBC, and this month's news and featured events.

Sincerely,  
The PIMS Team

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## EDUCATION HIGHLIGHTS



# Callysto

## Call for proposals

GET FUNDS FOR YOUR CLASSROOM ACTIVITIES

### [CALLYSTO: CALL FOR PROPOSALS](#)

If you teach Grades 5-12 students in Canada, Callysto wants to help fund your classroom activities related to **computational thinking, data literacy, and coding**. Callysto is a free, online program that helps Grades 5-12 students and teachers in Canada learn and apply in-demand data science skills — including data literacy, analysis, visualization, coding, and computational thinking — across any subject matter.

This is Callysto's fourth Call for Proposals — the theme for this Call for Proposals is **Developing Responsible Digital Citizens**. [Read about our past recipients for proposal ideas and inspiration.](#)

Applications will be accepted as part of a rolling intake until **4:00 pm Mountain Time on June 30, 2022**, for activities occurring between May 1 – August 31, 2022.

Visit the [Callysto](#) website to read more about award details, assessment criteria for submitting proposals and eligible activities.

[Callysto Proposal Application Form](#)



ELMACON 2022 Grade 5 winners

### [Elementary Math Contest \(ELMACON\)](#)

After a two-year absence in 2020 and 2021 due to the COVID-19 pandemic, ELMACON 2022 took place in-person at the UBC Vancouver campus. 214 students in grades 5 to 7 across BC came together for the 22nd annual PIMS elementary Maths contest and got to experience and enjoy Mathematics as an exciting sport. The contest, organized with the help of PIMS Education Coordinator, Melania Alvarez, gave participants the chance to compete in three exam rounds in separate grade divisions: Sprint, Target and Countdown (verbal one-to-one final round).

#### Countdown round winner highlights:

*Grade 5 (69 participants)*

- Bryan Ning, 1st Place
- Louis Qiu, 2nd Place
- Chase Wang, 3rd Place

*Grade 6 (76 participants)*

- Aston Wan, 3rd Place

Grade 7 (69 participants)

- Leonard Zhou, 1st Place
- Jack Wang, 2nd Place
- Yansheng Mao, 3rd Place

[View ELMACON 2022 results for list of all winners](#)

## SCIENCE RENDEZVOUS

This national science festival was a big hit this year across Canada and also at the UBC campus where PIMS was present. Many thanks go to the organizers, Wesley Wong (UBC) and Melania Alvarez (Education Coordinator, PIMS), who put in a lot of effort to create an exciting day for enthusiastic festival-goers. The day was packed with chances to meet world-class researchers and innovators, participate in hands-on family friendly science experiments, and see amazing tours and exhibits. The turn-out was better than expected; around 1500 people attended Science Rendezvous, including faculty, students and hardworking volunteers.

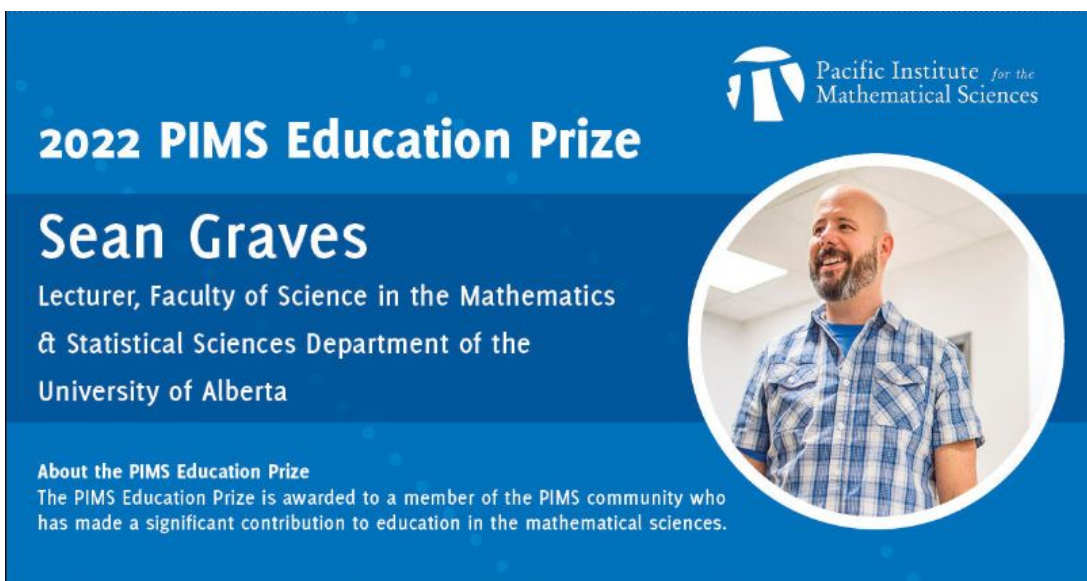
**Highlights include:**

- Getting hands on with a table of touchable fossils at the Pacific Museum of Earth.
- Live demonstrations for Hololens 2 and Oculus Quest by UBC HiVE.
- Making “create your own gut” art decoration pieces with Microbiology and Immunology at the Beaty Museum.
- A scientific talk on the discovery of the Higgs boson, ten years on, and the exploration of the Large Hadron Collider and the ATLAS detection experiment, by TRIUMF.
- A lesson on wild mushrooms and what we can eat.

Details on the Science Rendezvous can be found on the homepage [here](#).

*“It was wonderful to see how many people at the university are committed to science outreach and creating a better future.” -- **Melania Alvarez, PIMS Education Coordinator***


## NEWS & ANNOUNCEMENTS



**2022 PIMS Education Prize**

**Sean Graves**  
Lecturer, Faculty of Science in the Mathematics & Statistical Sciences Department of the University of Alberta

**About the PIMS Education Prize**  
The PIMS Education Prize is awarded to a member of the PIMS community who has made a significant contribution to education in the mathematical sciences.



Pacific Institute for the Mathematical Sciences

### 2022 PIMS Education Prize Announced.

PIMS is glad to announce that Sean Graves is the winner of the 2022 Education Prize. Graves is a faculty lecturer in the Department of Mathematical and Statistical Sciences and the Coordinator for the Decima Robinson Support Centre at the University of Alberta. This prize, awarded annually by PIMS, recognizes individuals and groups in the PIMS network, Western Canada and Washington State who have played a major role in encouraging activities which have enhanced public awareness and appreciation of mathematics.



# Math <sup>INDUSTRY</sup>

## 2022 Math to Power Industry Workshop. LAST CALL FOR APPLICATIONS!

The third Math to Power Industry Workshop will be convened remotely from July 11-29, 2022. It is a full-time workshop and most activities will take place from 9:00 - 16:00 MT daily. Participants will learn core business competencies including digital collaboration, project management, effective teams, and ethics. They will then shift to work in teams with non-academic mentors from industry, government or the not-for-profit sector to solve a business problem using mathematics. Applications from senior undergraduates to postdoctoral researchers are being accepted. The deadline to apply is **June 1, 2022 at 17:00 PDT**.

[Details here](#)



## Enrollment for PIMS Network Wide Graduate Courses Opens.

Thirteen new Network-Wide Graduate Courses for the 2022-2023 academic year are now open for enrollment! Five of these courses will take place in Fall 2022 and registration for them is now open.

- [Analytic Number Theory I](#) - *Habiba Kadir, ULethbridge*
- [OT+Bio - Single Cell Analysis](#) - *Geoff Schiebinger, UBC*
- [Statistical Machine Learning for Data Science](#) - *Li Xing, USaskatchewan*
- [Optimal Public Transport](#) - *Mahsa Faizrahmoon, SFU*
- [Mathematical Models in Cell Biology](#) - *Leah Edelstein-Keshet, UBC*

Students at Canadian PIMS member universities can register for these courses and get graduate credit via the [Western Deans Agreement](#). See the [Courses Website](#) for more information and registration details. Be advised, in some cases, students must enroll **6 weeks** in advance of the next term!

[Course details here](#)

## FEATURE EVENTS

### Prairie Discrete Mathematics Workshop 2022

**June 9 - 10. Online.**

The workshop builds on the success of the previous Prairie Discrete Math Workshops, from the

prairie provinces and nearby locations for a relatively informal workshop. Invited speakers include Mateja Sajna (University of Ottawa), Venkata Raghu Tej Pantangi (University of Lethbridge), and Boting Yang (University of Regina), among others. This event is part of the [PIMS CRG on Movement and Symmetry in Graphs](#).

[Register for event here](#)

## 29th Foundational Methods in Computer Science

**June 21 - 26. Calgary, Alberta.**

Foundational Methods in Computer Science is an annual workshop that brings together researchers in theoretical computer science and mathematics. Past workshops have been held at BIRS, Colgate University, Dalhousie University, Mount Allison University, University of Ottawa, UBC, University of Washington (Spokane), Reed College, and elsewhere. The meeting planned in Kananaskis in 2022 will be the 29th meeting, and the 8th meeting hosted by the Barrier Lake Station (also known as the Biogeoscience Institute) at the University of Calgary.

This year's scientific program, while continuing to welcome talks from all areas of category theory and theoretical computer science, is happy to host tutorials (and talks) on categorical quantum mechanics, conformal field theory, linear logic, differential categories, differential programming, and homotopy theory.

[Register for event here](#)

## View our calendars for more meetings and events

[Scientific Events](#)

## PRIMA Notices

### Pacific Rim Mathematical Association Congress 2022



**PRIMA**

December 4-9, 2022  
Vancouver, BC

## Pacific Rim Mathematical Association (PRIMA) Congress 2022 Registration is now open!

**Dec 4-9, 2022: In-Person, Vancouver, BC**

[Get your tickets!](#)

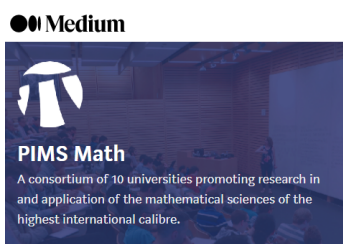
Whether you are a graduate student or postdoctoral scholar, take advantage of this full-day dedicated to early career researchers.

- Submit your abstracts for a short talk or poster session [here](#)
- Attend the PRIMA career fair and see what industry positions are open.
- Date: December 7, 2022



[Read More](#)

## MEDIA



### 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 2021 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](#)

### Follow PIMS and be a part of our community



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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 xwm̓θkwəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and Sel̓ilwətaʔ/Selilwitulh (Tsleil-Waututh) Nations.

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