Pacific Institute *for the* Mathematical Sciences

PIMS MONTHLY CONNECTION | June 2019

Hello from PIMS

May was an incredibly busy month for PIMS. We held Maryam Mirzakhani Day events to celebrate the life and work of Maryam and other women in the mathematical sciences across our Canadian sites; the 4-day clean energy workshop was a great success; and Etienne Ghys, the Permanent Secretary of the French Academy of Sciences, conducted a PIMS sponsored tour of Vancouver.

IMPORTANT NOTICES:

1. **The 14th Intl. Conference on Finite Fields and their Application - SFU: Jun 3-7.** Click here for details**.**
2. **PIMS - UVic Levin Fest: Simon Levin on June 15.** Click here for details**.**
3. **PIMS - U Saskatchewan Summer School on Algebraic Geometry in High-Energy Physics: Jun 24-28.** Register now.
4. **PIMS CRG Summer School: Deep Learning for Computational Mathematics at SFU, July 22 - 25.** Register now.

There are a number of fantastic events coming up this summer so please take a look at our calendar.
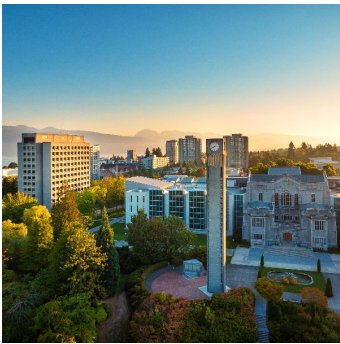
Sincerely,
The PIMS Team

FEATURE EVENTS

PIMS and Cybera are happy to announce the upcoming Data Science Industrial Fellowship program. In August, PIMS and Cybera will host a month-long workshop pairing industry partners together with fellows in data science at both the University of Calgary and University of Alberta PIMS sites.

The workshop is aimed at start-ups, entrepreneurs or other small to medium businesses who are looking to start their first data science project. Eligible fellows will be current or recent students, post-doctoral fellows or industry experts looking to gain new skills and expertise in the field of data science.
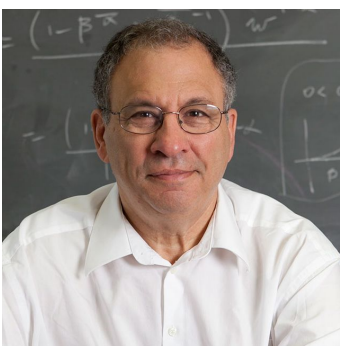
Please stay tuned here for further information and calls for applications.

PIMS Workshop on Arithmetic Topology
June 10-14 at the University of British Columbia
This 5-day workshop will bring together junior and senior researchers from across these areas with the goal of: Giving participants a global view of a fast emerging and multidisciplinary area, giving participants a detailed awareness on the range of methods available, and Emerging with a robust problem list which can help guide activity in the area for the next 5-10 years.

The University of Victoria - Levin Fest
Saturday, June 15 at 9:00 am - 5:00 pm
To celebrate the conferral of UVic Honorary Doctor of Science to Dr. Levin, and to raise the role of mathematical biology at PIMS Universities, members of the UVic Biology and the Math & Stats departments will be hosting "Levin Fest" with a keynote symposium by the man himself.

PIMS - U Saskatchewan Summer School on Algebraic Geometry in High-Energy Physics
June 24-28 at the University of Saskatchewan
This summer school will expose graduate students and recent postdoctoral fellows from mathematics to novel applications of geometry in theoretical physics and, for those from physics, to powerful algebro-geometric techniques that can be deployed in their work.

Click below for all events| June 2019

Scientific

Educational

Industrial

NEWS & ANNOUNCEMENTS

Meet the new PIMS Deputy Director: Prof. Marni Mishna

PIMS is very pleased and excited to announce that Prof. Marni Mishna of SFU Math has been appointed as the new Deputy Director of PIMS, effective July 1, 2019.

Please click here to read the full announcement.

We would like to take this opportunity to thank the Interim Deputy Direct, Prof. Anthony Quas for his efforts and the amazing job he has done in the role. Anthony will continue in the position of UVic PIMS Site Director.

Clean Energy and Mathematical Sciences Workshop

May 21-24, 2019, at the University of British Columbia
This four-day workshop sought to foster conversations between mathematical scientists and those working in the clean energy sector and that's exactly what happened. Aside from the thought-provoking lectures from high-profile speakers and panel discussions, there were also countless conversations over lunches and coffee breaks. We're really excited to see what collaborations develop from this unique workshop.

PIMS Sites Hold Maryam Mirzakhani Day Events

The first annual Maryam Mirzakhani Day events were held at U Alberta, Uvic, U Calgary, U Saskatchewan, UBC and U Manitoba. These PIMS sites had lunches for university and high-school students, held talks on the life and work of Maryam as well as introducing other female mathematical scientists to the audiences.

The events were well participated and many speakers and attendees are already looking forward to a bigger celebration of women in math next year.

MEDIA

[Modularity of Calabi-Yau Varieties](#)
Noriko Yui: PIMS - University of Saskatchewan Hugh C. Morris Lecture

For more lectures and PIMS resources, please visit mathtube.org

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PIMS COMMUNITY RECENT PUBLICATIONS

1. Cordova Bulens H., Lambrechts P., Stanley D. "[Rational models of the complement of a subpolyhedron in a manifold with boundary.](#)" 2018. Canadian Journal of Mathematics. 70: 265-293.

2. Cunningham C., Fiori A., Moussaoui A., Mracek J., and Xu B., "[Arthur packets for p-adic groups by way of microlocal vanishing cycles of perverse sheaves, with examples.](#)" Memoirs of the American Mathematical Society (in press). 2018. arXiv:1705.01885v4

3. Songhafouo Tsopm'en'e P. A., and Turchin V., "[Rational homology and homotopy of high dimensional string links.](#)" Forum Mathematicum 30 (2018), no. 5, 1209–1235.

4. Ghioca D., Hu F., "[Density of orbits of endomorphisms of commutative linear algebraic groups.](#)" New York J. Math. 24 (2018), 375-388

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**. We are proponents of mathematical **collaboration with industry**, **innovation in mathematics education** from K-12 to graduate level initiatives, **public outreach** and **partnerships** with similar organizations around the globe. We fund Collaborative Research Groups, Post-Doctoral Fellowships, individual events, and competitive prizes in mathematics.

FOLLOW US!