

PIMS AT-A-GLANCE



Pacific Institute *for the*
Mathematical Sciences

The Pacific Institute for the Mathematical Sciences (PIMS) is a consortium established by universities in western Canada and the Pacific Northwest. Our mandate is to promote research in the mathematical sciences and their applications, 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 (with a particular focus on the Pacific Rim). PIMS funds Research Networks, Collaborative Research Groups, Post-Doctoral Fellowships, seminars and other individual events on a competitive basis.

PIMS activities are funded by the Natural Sciences and Engineering Research Council of Canada (NSERC), Simons Foundation, Prairies Economic Development Canada, member universities and by private donors.

PIMS strongly believes that equity, diversity, and inclusion strengthen the mathematical community by increasing the impact and relevance of research, widening the pool of qualified potential participants, and enhancing the integrity of programs. The programs and groups we support should promote and develop a rich research community accessible to every member of our network.

PIMS MEMBER UNIVERSITIES:

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

AFFILIATES:

Portland State University
University of Northern British Columbia
First Nations University

FUNDING OPPORTUNITIES FOR PIMS EVENTS

PIMS supports the mathematical sciences community by [funding events and collaborations](#) in active areas of research across the network. www.pims.math.ca/programs/scientific/scientific-proposals

These can be in the form of:

- Conferences, Workshops and Summer Schools.
- Distinguished Visitors.
- Innovation Activities (involving industry and other non-academic partners).
- **Collaborative Research Groups (CRG)** which typically consists of researchers with overlapping research interests and with a common desire to collaboratively develop aspects of their research programs. Leveraging the organizational and administrative capacities at PIMS, CRGs will organize joint seminars and workshops, make joint PDF appointments, and develop joint graduate training programs. Each CRG is selected on a competitive basis and typically involves a three year investment of \$240,000. www.pims.math.ca/scientific/collaborative-research-groups
- **PIMS Research Networks (PRN)** which are groups of researchers from the PIMS network who work on problems of broad interest across the network. PRNs are designed to build bridges between research areas in academia, industry and the public sector. They are designed to go above and beyond the CRG mission by combining research, training, and crucially, strong external partnerships. www.pims.math.ca/programs/scientific/pims-research-networks

- **PIMS - BIRS - Simons Travel Award** which provides financial assistance of up to \$1,000 CAD to cover travel and local expenses for researchers attending a BIRS event who also plan to visit a PIMS-affiliated institution during their trip. This funding helps to reduce the carbon footprint of travel for research purposes by maximizing the scientific impact of each visit. <https://pims.math.ca/programs/scientific/visitor-and-exchange-programs/institutes-exchange-program>
- **Activities with Small Budgets:** Proposals to fund short-term visitors, hot topic reaction events, and other small budget activities can be submitted for consideration directly online via the PIMS page. Proposals are evaluated within a month of submission, and are typically funded in the \$2,000-\$3,000 range. www.pims.math.ca/programs/scientific/scientific-proposals#discretionary
- Seminar Series.
- Education and outreach activities.

PIMS POSTDOCTORAL FELLOWSHIPS

Each fall, PIMS invites nominations of outstanding young researchers in the mathematical sciences for [postdoctoral fellows](#). Candidates must be nominated by one or more scientists or by a department(s) affiliated with PIMS. The award for this highly selective competition combines \$30,000 from PIMS with co-funding from the sponsors. Additional funds from the Simons Foundation may be available for top-tier postdoctoral researchers. The deadline for nominations is December 1 of every year. www.pims.math.ca/scientific/postdoctoral

PIMS NETWORK WIDE PROGRAMS

PIMS supports online programs that provide our network with access to experts and lectures in the mathematical sciences.

- **PIMS Network Graduate Courses** utilize the PIMS network to deliver a rich variety of graduate level courses in the mathematical sciences at PIMS member universities. Students across the PIMS network can register for these courses and apply for credit through the Western Deans Agreement. <https://courses.pims.math.ca/>
- **Network Wide Colloquium Series** features online talks by distinguished speakers that are broadcast to the whole PIMS network and run during the academic term.

INDUSTRIAL: PIMS M2PI WORKSHOP

PIMS and our partners have offered the Math to Power Industry (M2PI) workshop every summer for the past five years. This workshop trains early career mathematical scientists for jobs in various non-academic sectors in Canada. The program begins with a training bootcamp (software best practices, business and communications, and project management) and includes group collaborations with industry partners. www.m2pi.ca

SPECIAL PARTNERSHIPS

PIMS – CNRS PARTNERSHIP

Since 2007, PIMS has been an international research lab of the Centre national de la recherche scientifique (CNRS IRL #3069). We facilitate and encourage research collaborations between mathematical scientists at PIMS member universities and researchers across France. Available programs:

- **CNRS Postes Rouge** offers financial support for faculty members from PIMS member universities to collaborate on a scientific project with a host at any of the Unités Mixtes de Recherche (UMRs) or Fédérations de Recherche (FRs) for a minimum of three months. www.pims.math.ca/cnrs/cnrs-postes-rouges
- **PIMS - Europe Fellowships** provides funding for faculty at PIMS member universities to carry out long term research visits to France. www.pims.math.ca/cnrs/pims-europe-fellowships
- **PIMS - CNRS Visitors** are French researchers who spend the academic year at any one of PIMS member universities. Priority is given to junior researchers: “charg(e)s de recherches” or “maîtres de conférences.” www.pims.math.ca/cnrs/visitors
- **PIMS - CNRS Postdoctoral Fellowships** is targeted to applicants that are French, or who have completed their PhD degree in France. Applicants apply via the PIMS PDF competition on Mathjobs. www.pims.math.ca/scientific/pims-cnrs-irl

COMPUTATIONAL PLATFORMS

- **Syzygy.ca**: a free-access project of PIMS, Compute Canada and Cybera that provides Jupyter as a computational platform for educational institutions across Canada. www.syzygy.ca

K-12 EDUCATION AND OUTREACH

An integral part of the PIMS mandate is to enrich public awareness of mathematics through **outreach and to enhance training for teachers and students in K-12**. PIMS is also a strong advocate for Indigenous students. PIMS supports various activities including:

- Workshops to facilitate communication between parents, teachers, mathematicians, and math educators.
- Teacher training programs.
- Diversity in Mathematics summer camps.
- Indigenous students math camps.

www.pims.math.ca/education

SPECIAL EVENTS

- In 2022, PIMS organized the **4th Pacific Rim Mathematical Association (PRIMA) Congress** in Vancouver. PRIMA brings together mathematicians from the leading mathematics research centers from around the Pacific Rim to coordinate activities and build international collaborations. The 2022 PRIMA Congress was held from December 4–9, 2022. www.primamath.org
- PIMS continues to champion engagement in key social areas such as climate modelling and energy transition. In 2023 PIMS established the **Action on Climate Thematic Summer (ACTS) Program**. As part of the program, PIMS hosted the **FACTS Panel on Tackling Climate Change** and the **Just Transition to Renewable Energy** on July 27, 2023, bringing together more than 150 community members to discuss this important topic. www.pims.math.ca/scientific-event/230727-fppcc
- Jointly organized by the Centre National de la Recherche Scientifique (CNRS), PIMS and the Consulate General of France, The **2024 France-Western Canada Workshop on Ocean and Polar Sciences** was a hybrid/satellite event for researchers that helped identify shared research themes and explored possibilities for new interactions. www.pims.math.ca/events/240229-fwcwoops