

PIMS MONTHLY CONNECTION | January 2020


## Hello from PIMS

Happy New Year! We wish the PIMS community all the very best for 2020.
We're pleased to announce that we have signed a renewal of our agreement with the CNRS, meaning lots of exciting opportunities for the PIMS community.

Over the coming weeks, there will be lots of fantastic programs filling up our annual calendar. These include a mix of our annual flagship events, as well as some new ones to the line-up. There are seminars, workshops, conferences, and summer schools happening all across our 10 locations, so there's something for everyone.

## IMPORTANT NOTICES:

1. UBC Discrete Math Seminar: Travis Scrimshaw. UBC, Jan 14. Learn more.
2. Math Biology Seminar: Clinton Durney. UBC, Jan 22. Learn more.
3. 2020 Combinatorial Algebra Meets Algebraic Combinatorics. Dalhousie University, Jan 24-26. Learn more.

Take a look at the full list of all our great events on the PIMS activity calendar.

Sincerely,
The PIMS Team

FEATURE EVENTS


Title: "Lascoux polynomials and colored vertex models"
In this talk, we will discuss Lascoux polynomials, the colored 5-vertex model, and the corresponding combinatorial interpretation from our result. No knowledge of the material will be assumed.


Math Biology Seminar: Clinton Durney. UBC January 22 at the University of British Columbia Title: 3D Modelling of Salivary Gland Invagination
In this talk, we develop a novel 3D-vertex model that allows for the investigation and quantification of the role that cellular mechanics and cellular rearrangements play during this vital morphogenetic process.


2020 Combinatorial Algebra Meets Algebraic Combinatorics. Dalhousie University.

## January 24-26, at Dalhousie University

The main achievement of these annual meetings is the establishment of an ongoing dialogue between two separate research groups who had previously been using different techniques to study similar mathematical problems.

Click below for all events |January 2020

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Scientific
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Educational

## Industrial

NEWS \& ANNOUNCEMENTS


## Joe Hamman to give a \#bcdata talk on 'Tackling Big Climate Data in the Cloud'

January's talk will be on 'Tackling Big Climate Data in the Cloud' by Joe Hamman from the U.S. National Center for Atmospheric Research (NCAR). Click here to register.


Why do I care?
My work in applied statsistics often requires reconstruction of combina
objects with measure of uncertainty objects with measure of uncertainty - Bayesian approach computing a
posterior distribution posterior distribution $\int \gamma(x) \pi(d x)$ - Example: building phylogenetic trees from new types of data (in particular. from new types of data (in particulatar:
copy number variation in cancers) $x=$ (trex, contimuons parameters) $\pi=$ posterior distribution
$z(x)=$ statistic of interost

Alexandre Bouchard Côté: Scalable approximation of integrals using non-reversible methods: from Riemann to Lebesgue, and why you should care


PIMS Interview: Antoine Petit - Building Scientific Bridges


## PIMS COMMUNITY RECENT PUBLICATIONS

1. Songhafouo Tsopm'en'e. P., and Stanley. D., "Polynomial functors in manifold calculus" 2018, Topology and its Applications. 248: 75-116
2. Brosnan. P., Reichstein. Z., Vistoli. A., "Essential Dimension in Mixed Characteristic" 2018, Doc. Math. 23, 1587-1600.
3. Chen. J., Warren. M., "On the regularity of Hamiltonian stationary Lagrangian submanifolds." Adv. in Math. (accepted, 2018).
4. Yeats. K., "A special case of completion invariance for the c 2 invariant of a graph" Canadian Journal of Mathematics. 70 no 6 (2018) 1416-1435

## 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.

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## FOLLOW US!

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