▲ Fields Institute MathEd Forum Report

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As we start a new school year, so too, the Fields Institute begins a new season of discussion, lectures, and research on math education at all levels. The Fields Institute for Research in Mathematical Sciences is a centre for mathematics research more broadly. The building itself, located in downtown Toronto, is beautiful, with mathematics-inspired sculptures and plenty of chalkboard space to support visitors wanting to collaborate.

The promotion of mathematics education has also always been an important part of the Institute's work. The Fields is home to the Centre for Mathematics Education (CME), which is dedicated to research in mathematics education. The CME oversees the *Fields Mathematics Education Journal*, which is an international peer-reviewed online journal that can be accessed for free online at **fieldsmathed.springeropen.com**. The CME also organizes Math Circles at the Fields, which is an opportunity for middle school and high school students to work on challenging problems to stretch their math knowledge or train for an upcoming contest. The Circles meet on Saturday afternoons, and are open for students in the Toronto area. The CME administers the Math Knowledge Network, which you can learn more about at **www.mkn-rcm.ca**.

Fields MathEd Forum

One of the key activities organized as part of the CME is the Fields MathEd Forum. The Forum is an open monthly meeting, where participants learn about and discuss current research and teacher practices in mathematics education at all levels. The Forum convenes on the last Saturday of every month at the Fields Institute. Teachers from K–12 and beyond, teacher candidates, math education researchers, and anyone interested in the challenges associated with teaching and learning math can find something interesting at the Forum.

Each meeting typically has a central theme, with presenters invited to speak about their research or classroom experiences. The themes and speakers are selected by the Forum's steering committee, a dedicated team of teachers, researchers, and other members of the math education community. One of this year's themes will be computational thinking, which relates to expressing a problem in a way that a computer would be able to follow. This includes algorithms, and has interesting connections to computer programming. Another theme will focus on semiotics, cognitive science, and the teaching and learning of STEM.

The Forum is also planning to host a special day on the importance of statistics and probability in memory of Burke Brown, a fixture at the Forum. Burke championed the importance of statistics and probability for all people, though it is often overlooked in math curricula. He worked on ways of making these ideas accessible to students outside the classroom, including the Taming of Chance Story Competition in 2015, which challenged students and adults to answer the question, "What would our world be like if the normal curve had never been discovered?" The winning submissions of this competition can be found at **tamingofchance.vretta.com**.

One highlight of the Forum is the annual Research Day, which occurs on the last Saturday in January. During this meeting, teachers, doctoral candidates, and other researchers present their current research to the Forum, including a collection of poster presentations to peruse during lunchtime. This is always a very interesting meeting, especially when the research has been conducted by classroom teachers. Anyone who is interested in presenting at this year's Research Day is encouraged to contact one of the members of the Forum steering committee.

The year is shaping up to be a very engaging one at the Forum, with great topics and speakers. If you are interested in the Forum, you can sign up to receive agendas for meetings as they approach. One of the most rewarding aspects of attending the MathEd Forum is to hear and participate in the discussions that occur after each presentation and during lunch. However, if you are not able to travel to Toronto to join in person, you can watch the presentations remotely through the Fields website.

Margaret Sinclair Memorial Award

Every year, the Fields Institute and the CME recognize an outstanding educator with the Margaret Sinclair Award. This award is given to someone who demonstrates innovation and excellence in math education at the elementary, secondary, college, or university level across Canada, and the winner is invited to give a talk at the Fields Institute the following year. The winner in 2018 was Dr. Peter Liljedahl of Simon Fraser University, who is perhaps most well known for his thinking classrooms. Thinking classrooms incorporate vertical non-permanent surfaces to encourage student collaboration and low-stakes exploration, as well as make student thinking easily visible for the teacher. Peter Liljedahl was also the keynote speaker at the OAME 2017 Leadership Conference, and one of the keynote speakers at the OAME 2018 Annual Conference. He is an engaging speaker, and his talk at the Fields is sure to reflect the spirit of the award. ▲