

Successfully retrieved submission WTH8664.



Application Form for the CMS 2022 Endowment Grants Competition

Deadline September 30

Title of Proposal

Fields Elementary Educator Programs

Contact information

The one person and place to communicate with the applicant(s).

Name Pamela Brittain

E-mail pbrittai@fields.utoronto.ca

Telephone 647-244-0747

Fax

Institution or department to administer grant funds

Name Fields Institute for Research in Mathen

Address 222 College Street

2nd Floor

Toronto, ON

M5T 3J1

Contact Pamela Brittain

E-mail pbrittai@fields.utoronto.ca

Telephone 647-244-0747

Fax

Summary

Less than 100 words

Total amount requested in this competition \$

2500

The Fields Academy: Elementary Educators Program aims to fill a gap in mathematical content knowledge of pre- and in-service elementary teachers. Research has shown that teachers with strong math skills can provide more engaging and dynamic math content to their students, and activate a curiosity and engagement with the subject. However, an elementary

Applicants

Put any specific information on the relevant experience or expertise of an applicant in "Other".

Name(s) Deirdre Haskell

Pamela Brittain

E-mail dhaskell@fields.utoronto.ca

pbrittai@fields.utoronto.ca

Position Deputy Director

Academic Coordinator K - 12

Employer Fields Institute for Research in

Fields Institute for Research in

Address 222 College St

222 College St

2nd Floor

2nd Floor

Toronto

Toronto

	On	On	
	M5T 3J1	M5T 3J1	
CMS Member #	014661	105687	
Current grants		2021 CMS Endowment Grant	

What you propose to do

at most 40 lines

Building on our proposal from last year we would like to request additional funding to continue to expand and grow the Fields Academy: Elementary Educators Program. Over the past year we have made significant progress in these courses, developing and launching three 'beta' courses for teachers and teacher candidates to test out and provide us with feedback. These courses have focused on foundational Numeracy skills, an introduction to Mathematical Modelling, and a substantial course on Financial Literacy. The courses were developed in collaboration with math researchers, active and retired teachers, and other math educators. So far, the 'beta' versions of these courses have received positive feedback, especially with respect to the content presented, along with suggestions for improvements that we are currently implementing. The courses are offered in an online, self-paced format using a number of different tools. Based on the feedback we've received we would like to improve the user experience, making the materials more interactive and easier to engage with, as well as shifting to a more professional looking platform. In addition to the online courses, we have also spent the past year increasing the content available on our website that teachers can use directly with their students, including short videos on specific topics, and a number of YouTube live events on topics such as Mathematical Modelling, and Geometry. We want to expand these offerings with links to the teacher education program. We are working on a Proofs and Logics course that will serve as both enrichment for teachers and provide them with resources and activities that they can use with their students (including some coding activities). As mentioned in last year's application, the need for these programs is based on solid research that shows significant gaps in elementary teachers' math content knowledge along with the potential impact these gaps can have on their students. The Fields Elementary Educators Program was designed to help address those gaps and make math more accessible to both educators and their students. We have already started to see the effects of our efforts and would appreciate the assistance of the CMS to help us continue to grow and build them.

Budget

Use Tab key to navigate

Description

Revenue

Fields Institute (direct financial support)	40000		
Fields Institute (in-kind administrative support)	7500		
CMS Endowment Grant requested	2500		
Total Revenue \$	50000		

Expenses

Program Coordinator	20000		
Curriculum / Content Development	20000		
IT Requirements (hosting, content platform)	10000		
Total Expenses \$	50000		

Other

Funding, partners, revenue potential, information on applicants such as publications or awards, at most 20 lines.

The Fields Institute for Research in the Mathematical Sciences was created in 1992 to promote mathematical activity in Canada and expand the application of mathematics in modern society. It is a registered charity and receives its operational funding from the Province of Ontario, NSERC, nine Principal Sponsoring Universities and many other affiliate universities and corporate entities. The Institute is situated at the University of Toronto, but operates independently from the University. Annual programming includes a full slate of long- and short-term events, such as specialized, six-month-long thematic programs, multi-day workshops and conferences, public lectures, recurring seminars, outreach activities, and start-up incubation. In 2016, the Centre for Mathematics Education was created. This group of international faculty and researchers (including those from the Institute's Principal Sponsoring Universities), teachers and school board members, representatives from the Ontario Ministry of Education, industry, media and the general public is devoted to transformative research in mathematics education and, by extension, STEM education. The applicant for this grant, and the person developing and overseeing it, holds a PhD in Education with a focus on elementary teacher math content knowledge and over 15 years of industry experience in STEM education. The Elementary Educator Program is being developed and overseen by a researcher with a PhD in Education with a focus on pre-service elementary teacher mathematics skills, who has nearly 20 years of experience in developing and implementing STEM education programs.

Project start date

Finish date