

# Karen Meagher

My first-degree was at the University of Alberta and I kind of fell into the Honours Math program.

The problem that started my PhD work came from a problem in computer science. If you write a computer program, or make a video game or something, you have to test it to make sure you haven't forgotten something or don't have any bugs in it. It can be tricky because you want to balance testing it thoroughly while still getting it to the market before it becomes out of date. Part of the project that I was doing was trying to figure out patterns, or designs that you can use to decide how you're going to test your computer game, or whatever, so that you balance those two things, that you can test it quickly but still thoroughly enough so that you'll catch any major problems.

I loved math when I was in undergrad and then I continued in math for my masters. That was a little bit exhausting and so I worked as a computer programmer for a while, and I got kind of bored of doing that. I think one of the big things that influenced my decision was that I had some really great professors along the way.



I work at the University Regina in the Department of Mathematics and Statistics and I'm a full professor.

In discrete math you often have very easy to state problems that are quite difficult to solve. What I like to do is to take these problems and phrase them in a different way and try to use algebra to solve them. For some discrete math problems, you just say well this happens to work or here's the answer I figured out. It can be a lot of one-off examples. What I like is to be able to use more algebraic methods, so more rigorous methods, to solve these problems.

I have many hobbies. There are many boring things that I really enjoy. I like running and riding my bike and before the pandemic I really liked going swimming as well. I really enjoy listening to podcasts, especially while I'm running. I do lots of different crafts, I like sewing and knitting. I also have a husband and two kids. My kids are not so little and we spend a lot of time together. My daughter and I have done many really great sewing projects over the last few months.

## CMS Women in Math Committee

The role of the Women in Math committee is to help make sure that women are represented and treated fairly and also to provide support for women in the mathematics community. I've only been the chair for about a year, and I quite like it. One of the things that I really like about it is that I get to meet other women mathematicians from across the country and so I know lots of amazing women who are doing math.

[Listen to our interview with Karen.](#)

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