

There's more to mathematics than theorems and proofs

Mathematics is a razor sharp tool to tackle problems  
in and outside science

Many companies and institutions, across several sectors  
and areas, have a huge influence on the world we  
live in. This influence can be harmful

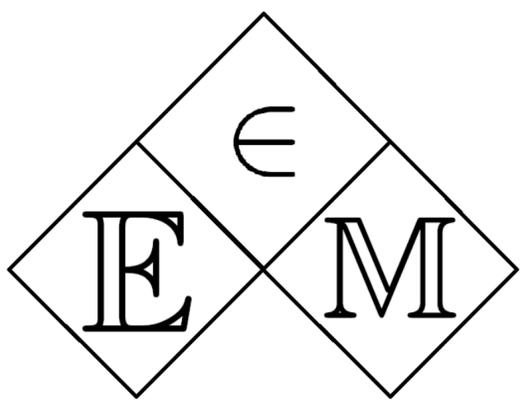
AND

They employ mathematicians for the job.

## *CU Ethics in Mathematics*

Mathematics is a profession. As such, we carry a responsibility  
to be aware of the harm we might do with our skills. CUEiM  
was formed to promote awareness and discuss ethical  
issues faced by working mathematicians. Come  
along to our seminars to find out more.

For details, visit **[cueims.soc.srcf.net](http://cueims.soc.srcf.net)**



# CU Ethics in Mathematics

All seminars at 5pm, MR3, Centre for Mathematical Sciences,  
led by Maurice Chiodo.

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## **Thu 13/10: Keep calm and carry on.**

To begin, we look at scenarios where mathematicians might cause harm. Who could we harm, and what might lead us to doing so? Realising how these situations arise, and what damage we might end up doing, is just the first step.

## **Thu 20/10: The allure of mathematics.**

What motivates us as mathematicians? Ours is one of the few professions where we enjoy our job so much that we'd consider doing it for free. Our dedication and determination to solve mathematical problems is one of our greatest strengths, but can also be our undoing.

## **Thu 27/10: Doing your job.**

Do mathematicians have the right to voice moral objection? Is it even possible in our line of work? If so, how would we recognise when to object, how would we begin to go about it, and what sort of obstacles might we encounter when trying to do so?

## **Thu 03/11: Mathematicians trying to help.**

Mathematicians often take it upon themselves to work for the betterment of humanity. Yet the highly complex solutions we develop can have unintended consequences far beyond their original design, often coming about because we fail to think ahead.

## **Thu 10/11: Using mathematics to prevent harm.**

Mathematics can be used to fight crime, avert destruction, and protect our society. But how far are we willing to go to do this, what are the drawbacks of such pursuits, and are they worth doing "at any cost"?

## **Thu 17/11: Straight from the horse's mouth.**

Making ethical decisions is difficult. We look at particular examples of mathematicians who went out of their way to make an ethical judgement, what motivated them to do it, and what the outcomes were.

## **Thu 24/11: Standing on the shoulders of giants.**

Our understanding of mathematics comes from building on that of those who came before us, and we are taught by them. So how well do they prepare us for the real world, and how much more do we need to know?

## **Thu 01/12: Going back to the start.**

We look back at what we have learned, to see how we can pursue these ideas further. What more can we do, how can we do it, and where do we begin?