



Bio Sketch for Geoff Whittle

What area of maths do you mostly work in?

I primarily work in matroid theory which is a branch of discrete mathematics.

Tell us a bit more...

Classically mathematics primarily focussed on infinite structures. Such structure make smooth change and calculus possible. But not all change is smooth and not all natural structures are infinite. A computer is a discrete machine and DNA is discrete. Applications to computer science and biology (as well as to many other things) have led to a massive growth in discrete mathematics. A matroid is a geometric structure with only a finite number of points. They have weird and wonderful properties and I find them perennially fascinating.

What areas of maths do you follow from a purely interest standpoint?

This varies. There's so much mathematics and so little time. And it is all so interesting. Currently I have a layman's fascination with information theory, its interactions with randomness and complexity and its applications to cryptography. Not long ago I was totally enthused by knot theory.

What were your best and worst subjects at school?

I was not particularly good at any subject at school but got by in most. Due to laziness I was a disastrous French student. To this day I am annoyed that I didn't grab the opportunity to learn more of such a beautiful language.

When you decided you wanted to be a mathematician and why

I went to university primarily to study philosophy. I wanted to solve the mysteries of the universe. Sadly everything I ever thought about regarding the mysteries of the universe had been thought about much more deeply by people much smarter than me. But I was also interested in mathematics. Over time I realised I wasn't bright enough to be a good philosopher - I could have been a bad one - and turned to mathematics instead. I've never regretted the choice.

What training (degrees and subjects) you've done

I did a BA at the University of Tasmania in philosophy and maths, with some history thrown in. I then did a combined honours degree in philosophy and mathematics, and a few years after that a PhD in maths.

Most interesting place you've travelled with your research

I tell students to decide on their area of research by first deciding where you would like to travel to and then checking out the research strengths, because they are the places you will end up travelling to. Sadly I did not do that, so I end up spending quite a bit of time in Canada in midwinter. But I don't just get snow and ice in my travels. I quite often go to Mexico and Holland and have a real fondness for both of those countries. These days I worry about my carbon footprint, but I still travel and I know that makes me a hypocrite.

If you follow sport, what sport, and which team - if not, why not!?

I used to follow Australian Rules football but living in New Zealand has caused my interest to erode. I live and die by the success or otherwise of the Australian cricket team. Sadly I happened to be in England when they lost the Ashes (just my luck). It's complicated by the fact that, for some reason, I am also a big fan of the Indian cricket team.