Bio Sketch for Marcus du Sautoy

What area of maths do you mostly work in?

I work in the border between group theory and number theory.

Tell us a bit more…

Group theory is the study of symmetry. But we still don't understand the range of symmetrical objects that are mathematically possible. I use a tool from number theory called a zeta function which gives me a way to find patterns in the sort of symmetrical objects that exist. The zeta function was first used by Riemann to understand prime numbers.

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

It's important to keep abreast of mathematics in areas outside your own because they can often give you new insights on your own research. I use a whole range of techniques in my research: algebraic geometry, logic and model theory, analytic number theory, Lie theory so I am interested to read about all these different areas

What were your best and worst subjects at school?

I enjoyed languages but I found mathematics the most satisfying language - no irregular verbs to learn. History was another favourite and I have enjoyed bringing the history of maths alive in my books and television work. Worst subject: cookery - I was never good at clearing up all the pots and pans after my latest culinary creation.

When you decided you wanted to be a mathematician and why

When I was about 12, my maths teacher pointed at me during one lesson and said "du Sautoy. I want to see you after the class". I thought I was in trouble but he was keen to encourage me to read something about what maths was really about. He really opened up the world of maths to me. Suddenly it wasn't all about long division but pattern searching and finding new ways to look at the world. I also attended the Royal Institution Christmas Lectures (lectures for children on science) about that time. It was the first time they had been done on maths. I came away from those lectures thinking "that's what I want to do". It was a great privilege to be invited to give the lectures myself in 2006 and hopefully inspire the next generation of mathematicians.

What training (degrees and subjects) you've done

I did a maths degree at Oxford and then stayed on to do my PhD at Oxford too.

Most interesting place you've travelled with your research

Mathematics is an international language so I've travelled all over the world meeting new people with similar interests to me. I attended an amazing conference in Assam in India. At the weekend as a break from mathematics we visited a rhino reserve.

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

I support Arsenal Football Club. I also play football for Recreativo Hackney, a team in East London. We were doing terribly one season so I persuaded the team to change our kit so we all played in prime number shirts (inspired by Beckham's choice to play in the number 23 shirt for Real Madrid). The next season we got promoted. So maths is useful for something. I play in the number 17 shirt.