



© 1997–2009, Millennium Mathematics Project, University of Cambridge.

Permission is granted to print and copy this page on paper for non-commercial use. For other uses, including electronic redistribution, please contact us.

---

01/09/2004

News

## Million dollar maths



It is hard to ignore the impact of advances in science on our lives – we hear about them in news headlines, they result in new products and services, and even become the topic of concerned discussions on whether we are ready for this or that new technology.

Now is your chance to meet those at the forefront of the world of science at the [BA Festival of Science](#). This week of events, lectures and debate with scientists from every field imaginable is being held in Exeter from the 4th to 11th of September. The theme is the responsibility of scientists in the 21st century, and the festival itself is a chance for scientists to perform one of the most important of these responsibilities – to help the public understand exactly what they have been doing at the front line.



Simon Singh

The main maths event is "Million Dollar Maths", a series of talks on the [Clay Millennium Problems](#) and what they mean to mathematics and to our everyday lives. [Simon Singh](#) will discuss Fermat's Last Theorem and introduce the seven problems identified by the Clay Institute in 2000, a solution to any of which is worth \$1m.

Two of the problems may have already been solved, but mathematicians Louis De Branges and Grigori Perelman must wait for their cheques while the mathematical community assesses their proofs. [Marcus du Sautoy](#) will discuss the Riemann Hypothesis – the "holy grail of maths" – and what it will mean if De Branges has indeed found a solution, while Keith Devlin will discuss the Poincaré Conjecture, and explain just why it is taking so long to check Perelman's proof.

## Million dollar maths



Marcus du Sautoy

Plenty of other events caught *Plus*'s eye, such as "The gap", a walking performance through Exeter's city centre, created by a mathematician, a writer and a visual artist. There is also a celebration of 150 years of weather forecasting at the Met Office, including past, present and future possibilities of monitoring weather and climate change, which might give us hope for a few more days of sun before winter descends.

There is the opportunity to meet the scientists behind the farm-scale trials of GM crops and discuss the benefits, dangers and advances in the field of GM. And Adrian Smith, who recently led the DfES (Department for Education and Skills) Inquiry into post-14 maths education, will speak on the importance of statistical thinking in our ability to judge scientific advances. There is also plenty from the world of physics, including medical and environmental, and reports of the latest from optics and space exploration, cosmology and the quantum world.

For more information, visit the [BA Festival of Science website](#), where you can book online for these and many more fascinating events. *Plus* is looking forward to the chance to visit the front line of science, and hopes to see some of you there. But even if you are not able to make it in person, there is plenty more information available from the BA, and of course here on *Plus*!

### Further reading on *Plus*

- More on the Clay Institute Millennium Problems in "How maths can make you rich and famous" [Part I](#) and [Part II](#).
- More on the Riemann Hypothesis in "[The music of the primes](#)" and "[A whirlpool of numbers](#)".
- More on the Poincaré Conjecture and Perelman's proof in "[Mathematical millionaire?](#)".
- More on the [philosophy of proof](#), including Fermat's Last Theorem and the computer aided proofs of the Four Colour Theorem and Kepler's Conjecture.
- More on the [GM crop trials](#) and the statistics behind them

Rachel Thomas



## Million dollar maths

*Plus* is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.