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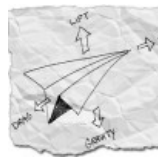
Issue 47

The *Plus* new writers award 2008

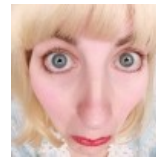
Read the winning entries in this issue of *Plus*



School winners



University winners



General public winners

Also in this issue...



Understanding uncertainty: The maths of surprises

You meet an old friend on holiday, you find your colleague shares your birthday, you win the lottery. Exactly how rare are these rare events? **David Spiegelhalter** investigates in his regular column on uncertainty and risk.



Saving lives: the mathematics of tomography

Not so long ago, if you had a medical complaint, doctors had to open you up to see what it was. These days they have a range of sophisticated imaging techniques at their disposal, saving you the risk and pain of an operation. **Chris Budd and Cathryn Mitchell** look at the maths that isn't only responsible for these medical techniques, but also for much of the digital revolution.



Cantor and Cohen: Infinite investigators part I

What's the nature of infinity? Are all infinities the same? And what happens if you've got infinitely many infinities? In this article **Richard Elwes** explores how these questions brought triumph to one man and ruin to another, ventures to the limits of mathematics and finds that, with infinity, you're spoilt for choice.



Cantor and Cohen: Infinite investigators part II

Richard Elwes continues his investigation into Cantor and Cohen's work. He investigates the *continuum hypothesis*, the question that caused Cantor so much grief.



Maths, madness and movies

In the movies mathematicians are mostly mad. Since here at *Plus* we firmly believe in our sanity, we're puzzled as to why. So we charged **Charlotte Mulcare** with the unenviable task of sifting through five well-known maths movies and speculate towards an answer.



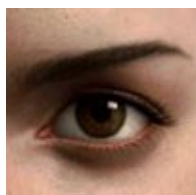
Catching primes

The primes are the building blocks of our number system, but there's no general formula that will give you all of them. If you want them, you have to hunt them down one by one. **Abigail Kirk** investigates a method that does just that.



Career interview: Exhibition curator

Exhibition design is not a career that the mathematically inclined tend to think about, let alone pursue. Barry Phipps is the first interdisciplinary fellow with the Kettle's Yard gallery in Cambridge. His remit is to develop projects of an interdisciplinary nature "to find the common ground between things." Whilst most people think that art and science are two completely separate non-overlapping areas of human endeavour, Phipps does not see it this way.



Teacher package: Vectors and matrices

This issue's teacher package brings together all *Plus* articles on vectors and matrices, exploring anything from the maths of computer movies to climate change. It also has some handy links to related problems on our sister site NRICH.



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