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March 2006

Issue 38

## features...

To arm or to disarm? This is the question in **Phil Wilson's** article, which explores the maths behind a cold war in slug world.



### Symmetry rules

Everyone knows what symmetry is, and the ability to spot it seems to be hard-wired into our brains. **Mario Livio** explains how not only shapes, but also laws of nature can be symmetrical, and how this aids our understanding of the universe.



### Anything but square: from magic squares to Sudoku

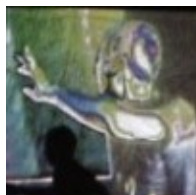
Get on a commuter train these days and you can virtually see people's brains crunching away at filling the numbers from 1 to 9 into a square grid. As the Sudoku craze shows no sign of slowing, **Hardeep Aiden** investigates its relatives and predecessors.



features...

Mysterious number 6174

6174 is a very mysterious number. **Yutaka Nishiyama** explains why, and how beautiful mathematical oddities can inspire us to discover new mathematics.



Career interview: computer music researcher

Teaching a machine to understand music is an incredibly difficult task, which uses all the mathematical power of digital signal processing. But teaching a machine to compose music is quite another matter, and the wonderful world of mathematical patterns proves to be a gold mine. **Nick Collins** talks to *Plus* about his artificial musician.



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