Quanta

For the record

We've been in this business 110 years and we plan to be in it forever

Lars Heikensten, *director of the Nobel prizes, quoted in* Nature

Heikensten was commenting on the emergence of other prizes in science that offer much more prize money than that of the $1.2 million Nobel awards.

It is a part of who I am that I am perfectly happy with

Nobel laureate **Saul Perlmutter** *quoted in the* Guardian

Perlmutter, who shared the 2011 Nobel Prize for Physics for discovering the accelerating expansion of the universe, was asked whether he thinks he is a geek.

Finding out I'd been selected was incredibly unexpected and exciting and humbling

Former Fermilab physicist **Josh Cassada** *quoted in* Symmetry

Cassada, who is a co-founder of Quantum Opus, a firm that develops photon detectors, discovered in June that he had been selected as one of eight new NASA trainee astronauts.

Our aim is to put ourselves out of business, to tidy the toys away

John Clarke, *chief executive of the Nuclear Decommissioning Authority quoted in the* Financial Times

Clarke was commenting on the clean-up of former nuclear sites in the UK, such as Sellafield – a nuclear site on the coast of Cumbria in north-west England.

I want to create a future where humans and robots can live together and get along

Japanese-built robot **Kirobo** *quoted on sky.com*

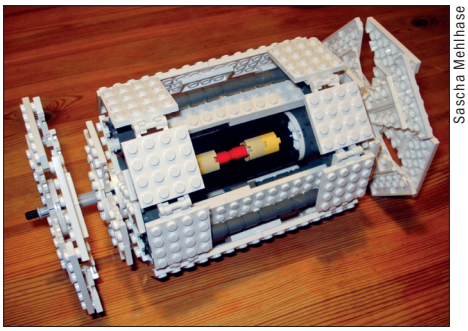
Japan says it will send Kirobo – a 34 cm-tall robot that weighs just a kilogram – to the International Space Station in August, where it will be used to test how machines are able to work with humans in space.

We found most were white, male, middle-class and over 50

Teresa Anderson, *director of the discovery centre at the UK's Jodrell Bank observatory, quoted on the BBC*

Anderson says she is targeting younger visitors at the observatory's discovery centre.

Seen and heard



Sascha Mehlhase

Bite-sized ATLAS

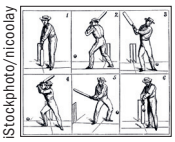
Avid readers of *Physics World* may remember the 9500-piece Lego model of CERN's ATLAS detector that was created by particle-physicist Sascha Mehlhase of the Niels Bohr Institute in Copenhagen (see January 2012 p3). Following that feat, the 32 year old designed a slimmed-down version built from just 560 pieces, which he submitted in June to Lego's CUUSOO – a site that lets fans share blueprints for their own models. Following the support of more than 10 000 people for the new mini-ATLAS, Lego will now conduct a review of the design, which may begin next month. If that receives the green light, then the ATLAS detector will go into a "development phase" where Lego designers refine the design and develop it to be sold as a real product. Mehlhase says he is still amazed by the support and hopes to hear some positive news from Lego soon. "I have a lot of people desperately waiting for this," he told *Physics World*.

Gazelles: one steppe ahead

Scanning through the contents of the latest volume of *Physical Review Letters* you might expect to see papers about topological insulators or Bose–Einstein condensates. So, imagine our surprise when we came across an article about Mongolian gazelles. Written by Cristólbal López of the Institute for Cross-disciplinary Physics and Complex Systems in Palma de Mallorca, along with colleagues in Spain and the US, the article contains a model to describe how these animals use sounds to help each other search for food (*PRL* **110** 248106). Using Monte Carlo simulations, the researchers modelled herds of Mongolian gazelles as particles moving in a 2D space and factored in "communication" between individuals and the richness of vegetation across the landscape, which they obtained using actual satellite imagery of the Asian steppe. When communication between the animals is either high or non-existent, the gazelles do not find the best grazing spots efficiently. However, at "intermediate" scales of communication the animals can locate the best spots within a few hours – a figure that roughly matches what happens in the wild. We look forward to López's next study, which he says will be on modelling gazelles' mating habits.

Hairs in space

NASA may have named its solar-sail demonstrator after a short story about a race in space using solar sails published in 1963 by the English author Arthur C Clarke but the links between Sunjammer and Clarke don't end there. The sail, which is about the size of a dishwasher when folded up but with an area of 1200 m^2 when fully deployed in space, will launch by the end of 2014 to test how the radiation from the Sun can be used for propulsion. However, space firm Celestis, which runs "memorial spaceflights" offering families the chance to send cremated remains into space, has announced that hairs plucked from the brow of Clarke – who passed away in 2008 – will be sent in a small capsule on the mission. If you fancy joining Arthur C Clarke then you will have to fork out £8000 – so get saving now.



iStockphoto/nicoolay

Bowling in the wind

In a well-timed research finding, physicists in Australia have released details of how a spinning cricket ball behaves in the presence of a wind (*Physica Scripta* **88** 018101). Brothers Garry and Ian Robinson of the University of South Wales and the University of Melbourne, respectively, found that when a spin-bowled ball hits a cross-wind coming in from either side of the pitch, the point at which the ball hits the ground can change by as much as 14 cm – enough to flummox a batsman. The brothers, who say that they played junior cricket as well as tennis at "quite a respectable level", told *Physics World* that the work was an attempt to model what actually happens on the cricket pitch, adding that "class bowlers" will intuitively understand the results of their study. As for who will win the Ashes series being played between England and Australia over the summer, Garry Robinson refuses to be drawn. "[We're] just interested in the physics of the situation," he says.