# SIDELINES

# **ON THE RECORD**

# "I was too black to be a scientist and too educated to be a lot of other things."

Guyanese novelist E. R. Braithwaite explains why 1950s British society led him to become a schoolteacher instead of a researcher after gaining his Cambridge physics doctorate.

### **SCORECARD**

Hybrid engines
The technology enjoyed
perhaps its finest
moment as the Toyota Supra HV-R
claimed victory in a Japanese
24-hour endurance race, leaving
non-hybrid rivals trailing in its wake.

Brakes
A study of urban traffic in Stockholm has shown that brake linings (unfortunately an essential component even of hybrid vehicles) give off a host of toxic metals, including copper, zinc and antimony.

# ZOO NEWS

### **Elephant goes cold turkey**

An elephant called Big Brother has become possibly the first to rid itself of heroin addiction with the aid of methadone. Illegal traders had spent two years feeding him bananas laced with heroin in an effort to control him and his herd, before officials in Yunnan, China, stepped in to put him back on the straight and narrow.

# **ROBOT NEWS**

# Shot in the arm

Engineers at Vanderbilt University have developed a robotic arm that could help amputees avoid the need to carry around bulky battery packs. The solution? The same type of rocket motor used to steer the space shuttle in orbit — which, as you might expect, packs quite a punch per pound.

Sources: BBC, Sci. Am., Environ. Sci. Technol., Reuters, ABC News

# Turkish physicists face accusations of plagiarism

"There are some

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as deplorable."

More than a dozen theoretical physicists at four universities in Turkey seem to be involved in a massive plagiarism scandal.

Almost 70 papers by 15 authors have been removed from the popular preprint server arXiv, where many physicists post their work, by the server's moderators. They allege that the papers plagiarize the works of others or contain inappropriate levels of overlap with earlier articles. This is probably the largest single incident of its sort ever seen on the server, according to physicist Paul Ginsparg of Cornell University in Ithaca, New York, and founder of arXiv. "What these guys did was way over the line," he says.

Not all the researchers or universities allegedly involved in the scandal could be reached as *Nature* went to press, but the author with the

most papers withdrawn called the accusations "ridiculous". "We carried out a good collaboration," says Mustafa Salti, a graduate student at the Middle East Technical University (METU) in Ankara whose name is on 40 of the withdrawn papers. "Most of our papers have

been published in the science citation index journals. Until now no one has claimed that we plagiarize."

The trouble began last November, when Salti and another graduate student, Oktay Aydogdu, underwent oral examinations for their PhDs. Although both had an extensive list of publications in gravitational physics, they struggled to answer even basic, high-school-level questions, according to Özgür Sarioğlu, an associate professor at METU. "They didn't know fundamental stuff like newtonian mechanics," he says.

Suspicious, one of Sarioğlu's colleagues, Ayşe Karasu, began to look through the duo's publication record. Using Google, she quickly turned up a paper from which it seemed the students had lifted several lengthy sections. By mid-February, faculty members had identified dozens of articles on arXiv that they say seemed to be partly or completely plagiarized.

They notified Ginsparg, who began his own investigation. So far, the search has turned up 67 papers, about half of which have appeared in low-profile peer-review journals. In addition to the two students at METU, the papers were authored by professors and students at three other universities: Dicle University in Diyarbakir, the University of Mersin in Içel, and

Onsekiz Mart University in Çanakkale. Sarioğlu says that most of the plagiarism seems to have come from two rival groups, one at Onsekiz Mart and the other at Mersin and Dicle.

Many of the papers concern an obscure theory of gravity known as the Møller version of general relativity. Few people would be likely to check such work, allowing the students and professors to build their publication record without fear of being caught, says Ginsparg. "They were following the optimal strategy."

"They're isolated, their English is bad, and they need to publish," says Sarioğlu. "So they plagiarize, I guess," he says of the alleged plagiarizers.

A recent analysis turned up numerous examples of plagiarism on the arXiv server

(see *Nature* 444, 524–525; 2006). Ginsparg says that it's not uncommon for scientists with a poor command of English to plagiarize introductions or background paragraphs from earlier work, often adding an appropriate citation. He thinks that although such practices

are ethically questionable, it is inappropriate to be overly draconian.

Katepalli Sreenivasan, director of the International Centre for Theoretical Physics in Trieste, Italy, which has a programme of collaboration with physicists from the developing world, agrees. "There are some cultures in which plagiarism is not even regarded as deplorable," he says. Problems of academic integrity come up frequently at the centre, and are dealt with on a case-by-case basis, he adds.

But both think that the Turkish case clearly crosses the line. "It's dishonest and sloppy," Ginsparg says. He adds that, although arXiv normally declines to publicize such incidents, the size and scope of this case made it an exception.

Salti and Aydogdu have been suspended for two terms, according to Sarioğlu. They cannot be expelled because METU's ethics policies for students do not include rules on plagiarism. But, he says, it is unlikely they will be able to continue at the university. Meanwhile, Salti says that he and several authors plan to bring a lawsuit against arXiv. It remains unclear whether the other three universities involved have taken any action.

**Geoff Brumfiel**