

## IRAN

# Killing of Professor Sparks Fight Over His Science and His Politics

As the first Iranian to receive a physics Ph.D. from a domestic university, Masoud Alimohammadi was a source of pride to his country. In 1989, when Pakistani Nobelist Abdus Salam inaugurated the doctoral program at the Sharif University of Technology, Alimohammadi's mentors touted him as proof that Iran could now produce the next Salam. In 2008, the government picked Alimohammadi, by then a professor of theoretical physics at the University of Tehran, to be its representative for an international scientific facility being built in Jordan called SESAME, Synchrotron-light for Experimental Science and Applications in the Middle East.

Last week, Alimohammadi was assassinated by a remote-controlled motorcycle bomb outside of his apartment. And the country's guardians clutched him even tighter to their bosom. Iranian authorities characterized the killing as an attempt by U.S. and Israeli intelligence agencies to rein in Iran's nuclear program. But colleagues and others believe that the government may actually be the culprit. They point to recent actions by Alimohammadi both before and after the controversial reelection of President Mahmoud Ahmadinejad last June as evidence that the physicist favored political changes and that his death was a warning to other academics who supported the reform movement.

One thing is clear: Alimohammadi was not a nuclear scientist. Trained as a theoretical particle physicist, he had spent years studying string theory and, more recently, dark energy. "His scientific contributions to the Iranian physics community cannot be replaced in the foreseeable future," says Hessamaddin Arfaei, a physicist at Sharif University who was Alimohammadi's thesis adviser.

Alimohammadi was one of 240 Tehran professors who had declared their support for Ahmadinejad's main opponent, Mir-Hossein Mousavi. A more recent example of his activism—and something that reformers say made him a target—occurred just a week before he was killed.

According to Ali Nayeri, an Iranian-born physicist at Chapman University in Orange, California, who first met him at Sharif University, Alimohammadi criticized the regime and urged open dialogue at a 5 January forum held at his department. Speaking to a gathering of students, he said he knew that fear of



**Slain scientist.** Masoud Alimohammadi was a theoretical physicist, not a nuclear scientist.

reprisals kept many more on campus from attending the event. "I too was instructed not to come," he said, according to Nayeri, who translated the talk—posted on YouTube—for *Science*. Frequently interrupted by audience members, some of whom wanted to hear him talk about fraud in the presidential election, Alimohammadi urged students to press on with the reform movement without descending into chaos.

Nayeri, a sympathizer of the reformist movement, says he and many students he has talked to believe that Alimohammadi paid a price for his activism. "His killing was masterminded by the Islamic Republic," Nayeri alleges. "The message to academics is, 'Don't meddle in the political sphere.'"

But another former colleague from the Institute for Studies in Theoretical Physics and Mathematics—where Alimohammadi was a research fellow in the early 1990s—says it's not implausible that the killing was planned by a foreign power. Reza Mansouri, who was deputy minister for research under Ahmadinejad's predecessor, Mohammad Khatami, says the disappearance last year of an Iranian nuclear scientist, Shahram Amiri, during a pilgrimage to Saudi Arabia has reinforced rumors that some foreign intelligence agencies would like to see some Iranian physicists dead. Maybe Alimohammadi was "targeted based on a wrong interpretation of his expertise," he says.

Last week's state funeral featured a confrontation between reformers and government supporters, with each side claiming the allegiance of the slain physicist. Meanwhile, more than 100 academics of Iranian origin around the world have demanded that the Iranian government investigate the murder and bring the assassins to justice. **—YUDHIJIT BHATTACHARJEE**

ScienceNOW.org

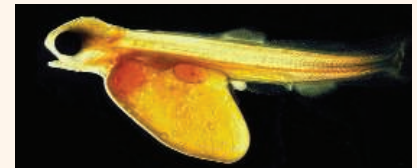
From *Science's*  
Online Daily News Site

### Time Machine Tune Up

It took nearly 30 years and a lot of heated debate, but a team of researchers has finally produced what archaeologists, geologists, and other scientists have long been waiting for: a calibration curve that allows radiocarbon dating to achieve its full potential. The new curve, which now extends back 50,000 years, could help researchers work out key questions in human evolution, such as the effect of climate change on human adaptation and migrations. <http://bit.ly/radiocalibration>

### A Better Suspension Bridge

A bit of bridge-building wisdom that dates back to 17th century Dutch polymath Christiaan Huygens needs a rethink, reports a team of structural engineers. Following Huygens's lead, engineers have assumed that the best design for a suspension bridge relies on simple cables that hang between towers in an elegant curve. A more-complicated design uses less material and is therefore more efficient, according to the new work. But it's not likely to appear on roads. <http://bit.ly/suspensionbridge>



### Why Did Fish Evolve Gills?

If you said, "to breathe," then you probably passed Biology 101. But you—and the textbooks—may not be right. A new study argues that the structures really emerged to help keep fish in chemical balance with their environment. <http://bit.ly/fishgills>

### Oil Drop Navigates Complex Maze

Lab rats, watch your back. Scientists have found a way to make simple droplets of oil navigate complex labyrinths with the same skill as laboratory rodents. The advance could help researchers devise better ways to solve other mazelike problems, from rooting out cancer in the body to mapping paths through traffic jams. <http://bit.ly/oildrop>

Read the full postings, comments, and more on [scienow.sciencemag.org](http://scienow.sciencemag.org).