research that the department funds. We've got a secretary and other colleagues in the leadership team with the kind of background and quality in the technical areas that we just have not seen in this department for a long time. And we've got the attention of the administration and the Congress in the things that we're being asked to do. It's a very interesting time to be here. And I'm also having a good time.

**David Kramer**

## Mexico hosts physics olympiad

For the first time in the history of the International Physics Olympiad, a girl was the top scorer in this annual competition of high-school students. She was Shi Handuo of China (see top photo).

It was only the fourth time the Chinese team included girls—there were two this year—and, as is typical, the team took home all golds; it was the only team to do so and had the highest overall score. Some 316 students from 72 countries competed in the 40th physics olympiad, which was held in Mérida, Mexico, 12–19 July.

ORGANIZATION COMMITTEE OF THE IPHO2009


PAUL STANLEY

South Korea, India, and the US, with total scores in descending order, each took home four gold and one silver medal. The US competitors were David Field (silver medal; center in bottom photo) of Andover, Massachusetts, and, from California, Bowei Liu and Marianna Mao (flanking Field), a sophomore and senior, respectively, at the same high school in Fremont; Anand Natarajan of San Jose (far left); and Joshua Oreman of Los Angeles.

The theoretical questions this year concerned the size of stars, laser cooling and optical molasses, and the growing distance between the Moon and Earth as tidal torques transfer angular momentum to the Moon. The experimental portion of the exam involved using a razor blade to measure the wavelength of a laser and then determining the birefringence of a mica crystal. "This was fantastic," says Paul Stanley, one of the coaches for the US team. "It was not a question of following cookbook instructions—plug in the wire, turn the dial, close the box, write down the measurements." Instead, Stanley says, "This year's experimental exam involved not only finesse at measuring but also in setting up the experiment. They had to think."

The 2010 olympiad will be held 17–25 July in Zagreb, Croatia.

**Toni Feder**

## news notes

**Industry forum spotlights cancer.** Frontiers in quantitative imaging for cancer detection and treatment was the theme of this year's Industrial Physics Forum (IPF). The meeting, sponsored by the American Institute of Physics, was embedded in the American Association of Physicists in Medicine conference in Anaheim, California, in July. Among the topics covered were the role of computers in medicine, advances in breast imaging, advances in ultrasound, and nanotechnology in imaging and therapy.

Jerry Hobbs, one of the event's organizers, notes that in meshing the IPF with a society meeting, "it boosts scientific content and ends up being an additional draw" for people to attend the host meeting.

One of the highlights at the annual IPF meeting is a session on frontier areas of physics—in any field. This year the session included talks on real-time DNA sequencing; opto-genetics; and breakthroughs in high-energy accelerators and the implications for smaller, cheaper medical accelerators.

The next IPF, which will be held in conjunction with the Optical Society of America's fall 2010 meeting in Rochester, New York, will celebrate the 50th anniversary of the invention of the laser by focusing on advances in lasers and laser-related products. **TF** ■

## web watch

**To suggest topics or sites for Web Watch, please visit http://www.physicstoday.org/suggestwebwatch.html. Compiled and edited by Charles Day**

### http://www.anacapasociety.org

Named after a Californian island that features a natural rock bridge, the **Anacapa Society** aims to help physicists at liberal arts colleges and other primarily undergraduate institutions (PUIs) carry out research in all areas of theoretical and computational physics. To meet that goal, the society helps theorists at PUIs collaborate with each other and with physicists at research universities. Its first workshop was held last month at Amherst College.

### http://vjaqf.aip.org/aqf


The American Institute of Physics and the American Physical Society have teamed up to publish ***Virtual Journal of Atomic Quantum Fluids***. Like AIP's other virtual journals, *VJAQF* compiles in one online location articles published elsewhere on specific topics of broad interest. Articles are selected for inclusion in *VJAQF* by a panel of expert editors.

### http://www.jpl.nasa.gov/asteroidwatch

**Asteroid Watch** is NASA's new online resource for news and other information about asteroids, comets, and other near-Earth objects. The Jet Propulsion Laboratory created and maintains the site, which includes a Twitter feed for the latest alerts.