Physics Olympians Compete in Spain

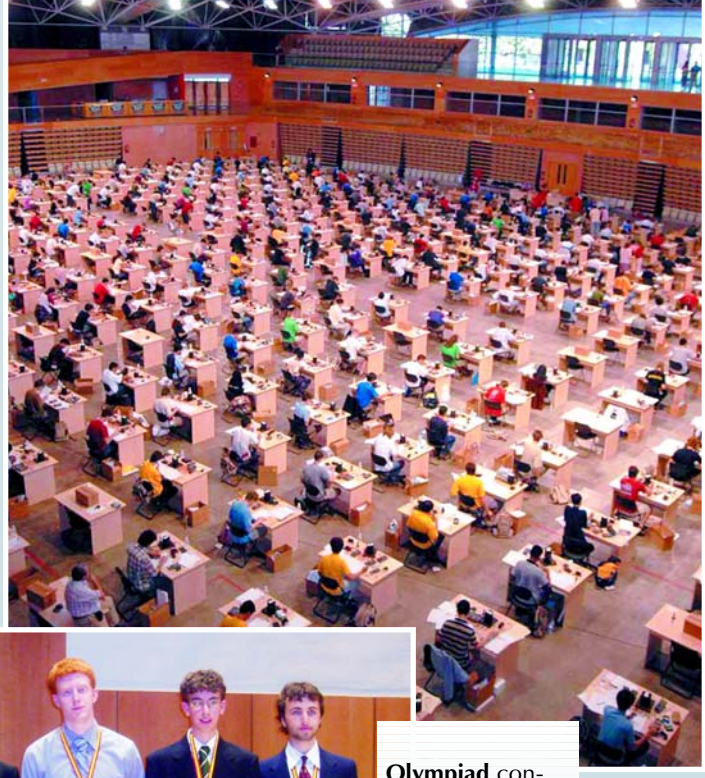
Salamanca, Spain, played host this past July to the 342 high-school students from 74 countries who competed in the 36th International Physics Olympiad. Hungary's Gábor Halász and Taiwan's Ying-Hsuan Lin tied for top score. A total of 46 students earned gold medals, with the teams from China and Taiwan each taking home all golds.

All five US competitors won medals: Menyoung Lee of Alexandria, Virginia, and Eric Mecklenburg of Gates Mills, Ohio, earned golds; Timothy Credo of Aurora, Illinois, and Nickolas Fortino of Andover, Massachusetts, garnered silvers; and Daniel Whalen of Andover won a bronze. The US team was sponsored by the American Association of Physics Teachers and the American Institute of Physics.

In one theory question, contestants were asked to calculate various parameters for a satellite, including the radial thrust necessary to escape Earth's gravity. The other theory problems visited the historical determination of the ohm and ampere and contrasted classical and quantum mechanical behavior of a neutron bouncing in a channel. For the experimental part of the exam, contestants connected a circuit and made measurements to deduce Planck's constant.

When they weren't tackling physics problems, contestants took in the sights; one highlight was a flamenco performance. With a nod to the World Year of Physics, some people visited an exhibition on Einstein, and the US team handed out WYP favors: pins and "Einstein cubes"—folding cubes with physics-related images and sayings.

Next year's physics olympiad will be held in Singapore. **Toni Feder**



MARY MOGGE

Olympiad contestants at work on the experimental exam (top). The US competitors (left) were, from left: Eric Mecklenburg, Menyoung Lee, Timothy Credo, Nickolas Fortino, and Daniel Whalen.

2004, page 32, and August 2004, page 22.)

NSF is expected to decide by early 2007 which site to pursue for DUSEL. With any *dusel* ("luck" in German), preparation of the underground lab will begin in 2009. Rough estimates put the cost, not including experiments, at around $200 million. **TF**

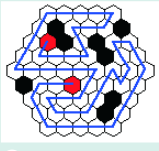
India eyes ITER. On 8 July, just days after the parties to ITER agreed to site the fusion energy test facility in Cadarache, France (see PHYSICS TODAY, August 2005, page 26), India expressed interest in joining the international project.

India's joining ITER will require unanimous endorsement by the project's six current partners. The European Union is "favorably disposed," says Susana Clement-Lorenzo, an official at the European Commission's research directorate. She notes that India is building a superconducting tokamak and could contribute usefully to ITER. As of press time, other partners had not weighed in.

The ITER partners aim to iron out the details of their collaboration by the first part of next year. International ITER team leader Yasuo Shimomura says that some partners, worried about delaying the project, would prefer to complete the negotiations before opening up the collaboration. **TF** ■

WEB WATCH

http://www.stetson.edu/~efriedma/puzzle.html



Erich Friedman, a mathematician at Stetson University in DeLand, Florida, conducts research in game theory, geometrical packing, computational complexity, and graph theory. Not surprisingly perhaps, he also devises mathematical puzzles. You can find hundreds of his challenging creations at **Erich's Puzzle Palace**.

http://www.snowresearch.org

Snow Research, an online resource put together by the US Army's Cold Regions Research and Engineering Laboratory, covers not only the science of snow, but also such practical topics as the impact of snow on military operations. The lab is based in sometimes-snowy Hanover, New Hampshire.

http://www.opticsforkids.org

Flash, an animated shooting star, guides children through a new educational website from the Optical Society of America. **Optics for Kids** includes games and experiments for children and lesson plans for teachers, parents, and guardians.

To suggest topics or sites for Web Watch, please visit http://www.physicstoday.org/suggestwebwatch.html.

Compiled and edited by **Charles Day**