productively used.

What surprised him most, he says, is the opinion of the public survey participants that US science is not preeminent among nations. "From my own experience when I travel to Europe or Asia, people are constantly seeing American science as the target, the gold standard that they are aspiring to," Leshner says.

Of the nearly 10 000 scientists who were contacted for the survey, 2533, or 25%, responded. The overall margin of error for the scientist survey was plus or minus 2.5%.

The poll of public attitudes toward science was based on interviews with 2001 adults 18 or older, and also had an error margin of 2.5%. The survey measuring the public's basic scientific knowledge involved interviews with 1005 adults, and carried a 3.5% margin of error.

The study and an online version of the public scientific knowledge test that was used are available at http://people-press.org/reports/pdf/528.pdf.

David Kramer

news notes

Supernova factory. Commissioning of the Palomar Transient Factory, which combines imaging with rapid data analysis and follow-up by other telescopes, is to be completed this month. "We will search for objects which change on the time scale of minutes, hours, and days," says PTF principal investigator Shrinivas Kulkarni of Caltech. The PTF has already discovered more than 40 supernovae since first light last December.

Located at Caltech's Palomar Observatory in Southern California, the PTF's wide-field-of-view camera, which is mounted on a 1.2-m optical telescope, piles up more than 100 gigabytes of data each night. As they're collected, those data are sent by a high-speed microwave connection to Lawrence Berkeley National Laboratory, where they are immediately compared with previous images.

"The 1.2-meter is a discovery engine. It finds approximately one transient object every 17 minutes," Kulkarni says. Data on transients found in the computerized analysis are returned to Palomar, where a 1.5-m telescope that is dedicated halftime to the project "provides vital filtering" down to a few objects a night for further observation. Telescopes around the globe to which the PTF's eight institutional partners in the US, UK, and Israel have access are notified about the selected objects. Although the PTF is mostly robotic, human eyes still double-check that the selected objects warrant more study. Software under development could reduce the notification time from 24 hours to real time, Kulkarni adds.

The tab for construction plus five years of running the PTF is about $2.6 million. "The cost has been kept low by the participation of many young people who were given major responsibility," Kulkarni says, noting that his postdoc Nick Law is the PTF project scientist. **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.compadre.org

ComPADRE is a compendium of digital resources for physics educators and students at all levels. Web Watch first featured the site in 2005. Now, six years after its debut in 2003, the site has grown considerably in size, scope, and usefulness.

http://www.esa.int/esa-mmg/mmg.pl?b=b&keyword=earth%20views&single=y&start=1&size=b

Watch **Earth views** and you'll get an idea of what our planet looks like to an astronaut in low-Earth orbit. The 12-minute video, which was put together by the European Space Agency, contains scenes shot from the space shuttle, Soyuz spacecraft, and the International Space Station.

http://www.stmary.ws/physics/home/crossword_puzzles

Aspiring physicists among the high schoolers you know might like to test their knowledge of physics by solving the **Crossword Puzzles** devised by students at St. Mary's High School in Manhasset, New York. The puzzles can be completed online.

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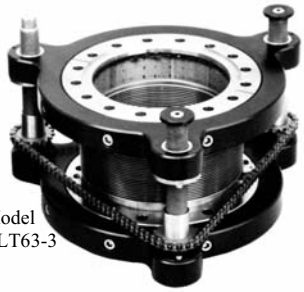

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1. ↑
2. ↓
3. **Repeat if necessary.**

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