

Extremely Large Telescope (EELT) and the Square Kilometre Array radio telescope top the priority list for ground-based facilities that exceed €400 million. The top picks in the medium scale (€50 million–€400 million) are the European Solar Telescope, the Cherenkov Telescope Array, and then KM3NeT, an underwater neutrino detector—the last two were priorities in the recent astroparticle roadmap (see *PHYSICS TODAY*, November 2008, page 25). The two highest-ranked space missions are the Laser Interferometer Space Antenna, a gravitational wave observatory, and the International X-ray Observatory. The full report is available at <http://www.astronet-eu.org>.

As a follow-up, Astronet has commissioned a review of Europe's 2- to 4-meter optical telescopes. The "heterogeneous mix of national and common instruments, equipped and operated without overall coordination," creates a situation that "impedes effective ground-based support of space missions," says Johannes Andersen, Astronet board chair and director of the Nordic Optical Telescope on La Palma. A review of Europe's millimeter–submillimeter and radio telescopes is also planned, as is one focusing on optimizing exploitation of 8- to 10-meter-class optical telescopes in the era of the EELT.

One goal of the roadmap, says Andersen, "is to define a common European strategy on future global-scale projects. We hope this will be helpful input to the new decadal survey in the US." Implementing the roadmap will require an increase of roughly 20% in current astronomy spending, which totals about €2 billion a year.

Toni Feder

US, China settle on nuclear terms

How does one define "assassin's mace"? The expression proved to be one of the most difficult of the 1000 or so terms that a US–China team of nuclear experts had to wrestle with as they assembled a common glossary that can be used in bilateral and international discussions involving nuclear security issues. The two-year project, sponsored by the US National Academy of Sciences' Committee on International Security and Arms Control (CISAC) and the Chinese Scientists Group on Arms Control of the Chinese People's Association for Peace and Disarmament, released its product in November; publication had been delayed for two months by the disastrous May earth-

quake in Sichuan Province.

Most of the glossary entries are simply matched to their equivalents in the other language. But some terms required more nuanced translations. "New thinking," for example, continues in the Chinese policy lexicon to denote the geopolitical philosophy advanced by Soviet president Mikhail Gorbachev two decades ago. "Self-defensive nuclear strategy" is China's official description of its no-first-use policy for nuclear weapons. Even "nuclear weapon" required four definitions, including one used by the North Atlantic Treaty Organization and another by the Russian government. On the other hand, both sides judged the terms "second-generation nuclear weapon" and "theory of low-intensity conflict" to be clear enough to stand alone. "The process was enormously useful," declared CISAC chair Raymond Jeanloz of the University of California, Berkeley. "The Chinese discussions provided a richer understanding of the ambiguities and implications" of translations.

The Chinese side initially resisted inclusion of assassin's mace, or *shashou jian*, dismissing it as US jargon, said Ming-Shih Lu, chair of the CISAC panel that produced the glossary. In US geopolitical parlance, the term describes a Chinese strategy to overcome a superior adversary with a quick technological knockout blow, particularly

in connection with a possible US intervention in a conflict between Taiwan and the mainland. When informed that former Chinese president Jiang Zemin had once used the term in a speech, the Chinese agreed to include it. Still, something may have been lost in the translation: Assassin's mace is defined as "a type of metal weapon" that is thrown unexpectedly at an adversary and as "a metaphor for an adept ability or unique skill used at a critical moment."

The glossary is available online at http://www7.nationalacademies.org/cisac/Glossary_CISAC.html.

David Kramer

news notes

Oppenheimer TV drama. On Monday, 26 January, the Public Broadcasting System will premiere *The Trials of J. Robert Oppenheimer*, a two-hour program centered around a dramatic re-creation of the 1954 US government hearings that confirmed the 1953 revocation of Oppenheimer's security clearance. During World War II, the theoretical physicist had been the head scientist of the Manhattan Project, which developed the atomic bomb. And after the war, he had served the government as a key adviser on nuclear-weapons issues. The dramatization of the hearings, with actor David Strathairn portraying the beleaguered Oppenheimer, is interspersed with commentaries by historians and scientists,

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://jrse.aip.org>



The *Journal of Renewable and Sustainable Energy* is the newest publication from the American Institute of Physics. Published online but not in print, JRSE covers all aspects of the generation, conversion, and distribution of green energy. The journal's peer-reviewed papers are complemented by a blog, news picks, and interviews with scientists and policymakers.

http://www.foreignpolicy.com/story/cms.php?story_id=4555

Writing in the journal *Foreign Policy*, Richard Muller has drawn up **The List: Five Physics Lessons for Obama**. The succinct lessons cover terrorism, energy, nuclear energy, space, and global warming. Muller is a physicist at the University of California, Berkeley.



http://www.trumanlibrary.org/whistlestop/study_collections/bomb/large

The **Harry S. Truman Library and Museum** has been steadily scanning its trove of presidential records and making them available online. The collection about Tru-



man's decision to drop atomic bombs on Hiroshima and Nagasaki now includes more than 70 items.