

as part of a state-run initiative. And a preliminary design for the full DUSEL (with lab space at depths approaching 2500 m) will be submitted to NSF next spring. The push for a US underground lab is “gaining tremendous momentum,” says DUSEL principal investigator Kevin Lesko of the University of California, Berkeley. “If we count up the US scientists involved in underground science, it’s easy to get to 700, and once you get action to go forward, that number will grow.”

Other underground lab projects include a proposed expansion of the Kamioka Observatory in Japan and this fall’s opening of the expanded Canfranc Underground Laboratory in Spain—now the second largest underground lab in Europe after Gran Sasso. For its megaton detector, the LAGUNA study is looking in seven countries—Italy (not Gran Sasso), Finland, France, Poland, Romania, Spain, and the UK. “We will

recommend the best European sites at the end of the year,” says Rubbia. After that, scientists in the US, Europe, and Asia will work together on the project since, in all likelihood, no more than one such billion-dollar-class facility will be built.

China has not expressed interest in hosting such a large experiment, but it might some day. Although the CJPL is small for now, there is much talk and excitement about its future. Says Henry Wong, a CDEX member from the Academia Sinica, “Growing is a safe statement. But how fast and how big is not known.” At this point, he says, there are discussions, plans, and lobbying, but nothing more concrete than interest. “The key ingredients look promising. And in China, if there is a good science project, and local and international interest, they can get resources,” says Wong.

Toni Feder

Physics olympiad meets in Croatia

A greater open-endedness to the questions in the 41st International Physics Olympiad marked a return to a tradition that rewards competitors for creativity and originality, says US team coach Paul Stanley of Beloit College in Wisconsin. A previous trend toward a more guided “cookbook approach” came about because it made grading easier, he adds.

Some 370 high-school students from 80 countries participated this year in the olympiad, held 17–25 July in Zagreb, Croatia. Despite the more challenging exam format, the team from China shone as it has for years. Yichao Yu earned the top overall score, the top score in the theoretical section, and recognition for the most original solution, and all five Chinese competitors won gold medals. The teams from Taiwan and Thailand also took home all golds. Hungary’s Zoltán Jéhn scored the highest in the experimental part of the competition.

Some teams that have traditionally done very well slipped a bit, including those from the US, Japan, Iran, India, and Russia, notes Stanley. Still, all five US competitors won medals. Daniel Li of Fairfax, Virginia, garnered a gold; Eric Spieglan of Lisle, Illinois, and Anand

Oza of North Potomac, Maryland, won silvers; and Jenny Lu of Southbury, Connecticut, and David Field of Andover, Massachusetts, won bronzes.

The theoretical questions this year concerned the height for efficient burning in a chimney; image charges; and binding energy, fission energy, and other calculations for atomic nuclei. The experimental tasks involved measuring forces between a ring and a rod magnet and determining bending rigidity and Young’s modulus using a flexible foil.

Next year’s physics olympiad will be held in Bangkok, Thailand.

Toni Feder



The US high schoolers who competed in this year’s physics olympiad in Zagreb were, from left, Anand Oza, David Field, Dan Li, Jenny Lu, and Eric Spieglan.



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