## UC SANTA BARBARA



April 12, 2017 Julie Cohen

## **Competition Physics**

Physics as a team sport? The idea is not so far fetched.

For two days each February, the United States Association of Young Physicists Tournament (USAYPT) pits teams of high school students in fierce but friendly debate, arguing the pros and cons of a set of problems they have examined in the months leading up to the event.

The brainchild of UC Santa Barbara physicist <u>Tengiz Bibilashvili</u>, the American tournament is modeled on the International Young Physicists Tournament (IYPT). Bibilashvili's Georgian national team in 1993 earned a gold medal in that global competition. Relocating to the U.S. in 2004, Bibilashvili became a coach for the American IYPT team before co-founding the USAYPT in 2007.

Now, the latter organization has paid tribute to its creator by naming an award after him: the Bibilashvili Award for Excellence in Physics.

"This award recognizes teams that perform exceptionally well during the tournament, giving them something to bring back to their schools to help secure financial support for the following years," explained Bibilashvili, a lecturer in the Department of Physics and the campus's College of Creative Studies.

As USAYPT tournament director, Bibilashvili determines the number of teams that earn the award that bears his name. At this year's event, seven top teams were given the medal, including an all-female team from Tunisia. Over the years, the tournament — originally designed for American participants — has grown to include international high school teams hailing from as far away as Australia, China, Singapore and Slovakia.

"The diversity makes the tournament even more valuable to the participants," Bibilashvili explained. "It is great to see students meet and interact with people from other cultures. The interaction is amazing."

The structure of the American tournament is similar to its international counterpart; however, it features four debate problems instead of 17. "We want each problem to involve both theory and experiment," Bibilashvili explained. "Our unofficial motto is, 'Teaching by doing research,' so tournament debate topics shouldn't have answers that can be checked in the back of a textbook, because research is never like that."

The USAYPT is broken down into the preliminary rounds, which take place the first day and a half, and playoffs, which are held the afternoon of the second day. Teams that don't advance to the playoffs participate in a poster competition designed to maximize their engagement throughout the event.

Each year, a different university or high school hosts USAYPT. Bibilashvili hopes that one day UC Santa Barbara will have that honor. "This competition matches the ideology and vision of UCSB's College of Creative Studies," he said. "Since the tournament appeals to those who love doing research, it might attract some really good students to UCSB and CCS."

## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.