

## 2009 USA Mathematical Olympiad Winners

By Steven R. Dunbar

This year, 12 outstanding high school students are winners of the 2009 USA Mathematical Olympiad (USAMO). They are the best of the more than 220,000 students who took part in a series of increasingly demanding contests put together by the Mathematical Association of America's Mathematics Competitions program, which culminated with the challenging USAMO exam. A total of 515 students took the USAMO on April 28–29, 2009 in their schools, and the results were scored by 23 mathematicians at the MAA Carriage House on May 8–10. The USAMO Problems and Solutions are available at the American Mathematics Competitions website. This was the 38<sup>th</sup> annual USAMO sponsored by the MAA.

The winning students took part in awards festivities on June 8 at MAA headquarters in Washington, D.C., from 8 am until 12 pm. Later that evening there was further celebration at the U.S. Department of State, hosted by John Holdren, Director of the President's Office of Science and Technology Policy.

Each winner received the USAMO Medal, named in honor of Gerhard C. Arenstorff, twice a winner of the USA Mathematical Olympiad and also a member of the first USA team in the International Mathematical Olympiad. In addition, each winner received an "Einstein" savings bond as the Robert P. Balles USA Mathematical Olympiad Prize. Balles, a lifelong student of mathematics and former mathematics instructor, established this award to recognize and reward these high achieving students of mathematics.

In the days following the awards program the winners will take the rigorous team selection test to try to qualify for the United States team for the International Mathematical Olympiad (IMO), to be held in Bremen, Germany, July 10–22. That team will consist of the six students with the highest combined scores.

### The 12 USAMO winners are:

**John Berman:** John graduated from John T. Hoggard High School in Wilmington, North Carolina and will be attending



*The 2009 USAMO winners at the US Department of State. Pictured left to right are: Eric Larson, Qinxuan Pan, Delong Meng, Sergei Bernstein, Toan Phan, John Berman, David Rush, Robin Cheng, David Yang, Vlad Firoiu, and Wenyu Cao. Panupong Pasupat is not pictured. Photograph by Ryan Miller.*

MIT in the fall with a primary interest in mathematics and physics. He was a recipient of a medal at the Romanian Masters of Mathematics Contest and he will attend the International Linguistics Olympiad this summer in Poland. His interests also include computer science, linguistics, philosophy, and history.

**Sergei Bernstein:** Sergei is a recent graduate of the Belmont High School in Belmont, Massachusetts and is planning to enroll at MIT. Sergei was a USAMO winner in 2007 and earlier this year was awarded a silver medal in the Romanian Masters of Mathematics Contest. Sergei placed fifth in the North American Computational Linguistics Olympiad and will represent the U.S. in the International Linguistics Olympiad in July. His interests include walking, meditating, music, and socializing.

**Wenyu Cao:** Wenyu is currently a 10<sup>th</sup> grader at the Phillips Academy and is very interested in attending MIT or Harvard. He was a semifinalist in the 2007 National MathCounts Competition and has been invited to the USA Invitational Computing Olympiad over the past two years. This year, he received a gold medal at the Romanian Masters of Mathematics Contest. His inter-

ests include table tennis, programming, and chess.

**Robin Cheng:** Robin attends Pinetree Secondary School in British Columbia, Canada. He's thinking about attending The University of Waterloo in Canada but has two choices in the USA; MIT and Caltech. In 2008, Robin was on the Canadian IOI team to Egypt and received a bronze medal and will again be on the team this year in Bulgaria. His interests include table tennis, badminton, programming, and all kinds of music.

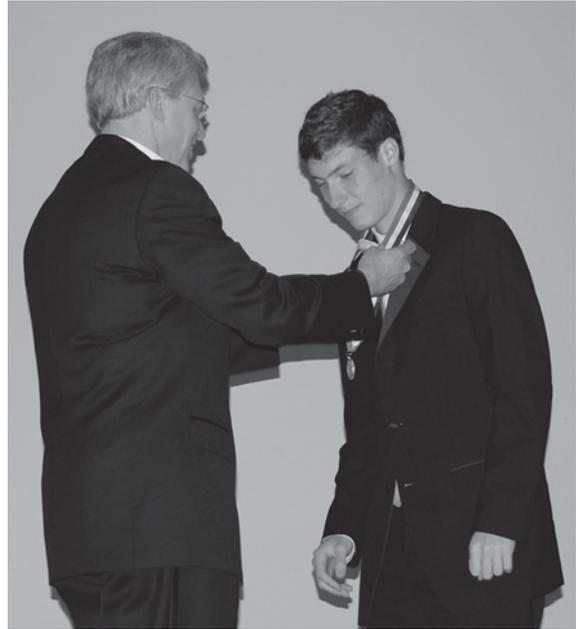
**Vlad Firoiu:** Vlad is a junior at the Westford Academy in Westford, Massachusetts and is thinking seriously about attending MIT. He placed second at ARML in 2008. He is also a former number one tennis player in New England. Besides mathematics and tennis, his interests include computer programming, and table tennis.

**Eric Larson:** Eric, a graduate of South Eugene High School in Eugene, Oregon, will be attending Harvard this fall. He placed first in both the Intel Science Talent Search and the Intel International Science and Engineering Fair in 2009. He also placed second in the Siemens Math, Science, and Technology competition in 2008, and received a silver medal in the International Mathematical Olympiad in 2007. Playing Bach fugues is a passion for Eric as he has been a gold medalist in the Oregon Junior Bach Festival for the past five years.

**Delong Meng:** Delong graduated from Baton Rouge Magnet School and will be attending MIT in 2009 where he will study mathematics. Delong was also a USAMO finalist in 2008. In high school he was active in student government and in his church. In his spare time, Delong likes to play basketball, ping-pong, and go.

**Qinxuan Pan:** In 2008, Qinxuan won numerous math awards including ARML Individual 1st place and University of Maryland Math Competition 1st place. In Spring 2009, he represented the USA at the Romanian Masters in Mathematics and won a silver medal. Qinxuan's other hobby is classical music. He won first place in the Music Teacher National Association Senior Division in Maryland last fall. Besides math and music, Qinxuan also loves soccer, movies, and computer games. Qinxuan is going to attend MIT this fall.

**Panupong Pasupat:** Panupong is a native of Thailand, and he is very interested in attending MIT. Participating in the International Mathematical Olympiad has earned him two silvers and one gold in 2005, 2006, and 2007. He was also a gold winner in the IOI in 2008 and won the top individual



*MAA President David Bressoud pins a medal on Vlad Firoiu at the USAMO Awards Ceremony held at the U.S. Department of State. Photograph by Ryan Miller.*

first place in the Harvard-MIT Math Tournament.

**Toan Phan:** Toan attends the Taft School in Watertown, Connecticut and he is a two time individual winner of the New England Math League and he was one of six representing the U.S. at the Romanian Masters in Mathematics. His interests include playing soccer, computer games, and playing the piano.

**David Rush:** David is a graduate of the Phillips Exeter Academy and will be attending MIT this fall. While at Phillips Exeter Academy, he was awarded superior achievement prizes in European history and accelerated German, the Hoar Prize for distinction in American history, and the Morgan Prize for distinction in advanced mathematics. As a representative of the United States at the 2009 Romanian Master of Mathematics, he earned a bronze medal. His interest over the past year has been being the president of the student government.

**David Yang:** David is the youngest winner at 12 years-old, and he is home schooled in Walnut, California. He placed second in this year's national MathCounts. His interests include computer programming, chess, reading, and go. 🎮

*Steve Dunbar is the MAA Director of Competitions.*