

Special Editorial Commentary Based on a Recent Interview

Ruth Favro Wins National Award for Mathematics Coaching



[Solstice](#) author and Lawrence Technological University Professor Emerita, Ruth Favro, has won the 2015 Samuel L. Greitzer Distinguished Coach Award presented by the American Regions Mathematics League (ARML; <http://www.arml.com>). The Samuel L. Greitzer Distinguished Coach Award is given each year by the ARML Executive Board to a coach or coaches for outstanding service to a regional team. In 2015 the Greitzer Award was given to Favro for service to the Michigan team. She has been coaching for 20 years and served as head coach for 10 years.

Dr. Sam Greitzer (1905-1988) taught at Rutgers University in a distinguished university career that also included secondary school teaching. He was a founder of the USAMO in 1971, [1] and led the United States team in the International Mathematics Olympiad for the first 10 years of

its participation, starting in 1974 [2].

The All-Stars compete in the annual ARML competition, a national team mathematics competition for high school students, where about 150 teams of 15 students from the United States and Canada come together at four sites across the country.

The name of the team Favro coached for many years, the "Michigan All-Stars", shows in her graph-theoretic T-shirt. It was designed by one of the students and won the best T-shirt award at their site at the University of Iowa.

The Michigan All-Stars have consistently done well in the ARML competition, fielding up to three teams: the Reals, the Naturals, and the Primes. The A-Division Reals have been as high as 5th nationally (2001). In 2011 the Naturals were #1 nationally in the B Division, and were moved up to the A Division.

Michigan team members are recruited from the top students in the Michigan Mathematics Prize Competition (MMPC, www.emich.edu/math/mmpc/), a high school contest sponsored by the Michigan Section of the Mathematical Association of America (MAA; <http://www.maa.org>).

Favro, herself, is a graduate of Wellesley College, where she majored in Art History and took all the courses for a major in Mathematics. She received an M.S. in Applied Mathematics at New York University and continued at Wayne State University after moving to Detroit. She taught at the Polytechnic Institute of Brooklyn while in New York, and then at Lawrence Technological University for 36 years. Her interests are in computer graphics, fractals and chaos, mathematical modeling, and mathematical art. She organized outreach workshops with middle and high school students, especially to encourage girls to study mathematics, and coached team mathematics competitions at Lawrence Technological University as well as for the All-Stars.

With characteristic generosity, she notes:

"I would like to thank Dr. William C. Arlinghaus, my colleague at Lawrence Technological University (Professor and Department of Mathematics Chair), for getting me seriously involved in the MMPC as Director, which led to meeting the coaches of the All-Stars. Bill is, himself, a two-time winner of an MMPC Silver Medal (shown below) and also a Solstice author. Tradition endures!"

Also I would like to thank my mentors, Dr. Bob Messer (Albion College) and Dr. John Fink (Kalamazoo College), co-founders of the All-Stars, for being superb role models as coaches and mentors of the students.

Working with these great students has been a wonderful experience. They are fun and interesting, and they enjoy the social aspects of the team math competition. We try to encourage more girls to participate, as well as students from all parts of the state. And I am grateful to work with a super group of coaches and assistant coaches, who help make this a good experience for the students."





[1]. The USAMO (USA Mathematical Olympiad) was conceived as the next step up for the top students in the AHSME (American High School Mathematics Exam). The AHSME has been replaced by the AMC (American Mathematics Competitions) with a further exam, the AIME (American Invitational Math Exam), which leads to the USAMO.

[2]. Two obituaries give details of Dr. Greitzer's career: <http://www.amt.edu.au/obitgreitzer.html> and <http://www.maa.org/publications/periodicals/convergence/dear-professor-greitzer-sam-greitzer>.