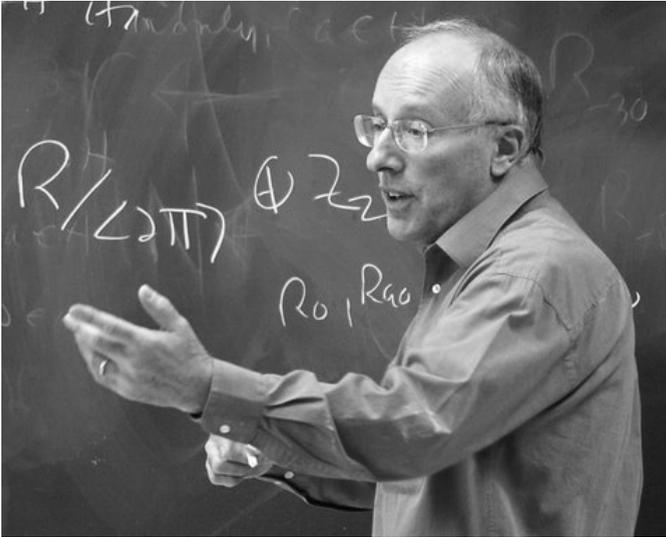

Yueh-Gin Gung and Dr. Charles Y. Hu Award for 2011 to Joseph A. Gallian for Distinguished Service to Mathematics

Barbara Faïres



Joe Gallian.

The two themes that run through Joseph A. Gallian's service to mathematics are (a) encouraging young mathematicians and helping them to develop successful careers and (b) communicating mathematics to the widest possible audience. He was one of the early proponents of undergraduates conducting mathematical research, and his REU at Duluth, which began in 1977, is widely regarded as the premier REU. The quality of the work at Joe's REU is evidenced by the 160 papers by participants that grew out of their REU work. These papers have appeared in such journals as *Crelle's Journal*, *Journal of Algebra*, *Journal of Combinatorial Theory*, *Discrete Mathematics*, *Applied Discrete Mathematics*, *Annals of Discrete Mathematics*, and *Journal of Graph Theory*. The REU, along with Joe's continuing contact with its participants, makes an important contribution to developing the next generations of mathematicians. Participants have included some prominent mathematicians, whose careers this REU helped to shape. Joe is also an inspiration to a generation of mathematicians who involve students in high-quality undergraduate research in mathematics. Not only is Joe successful with his own REU, but he is generous with his time and advice to help others to set up REUs. In 2002, Joe was recognized by the Council on Undergraduate Research with their Fellow Award, given to members who have demonstrated sustained excellence in research with undergraduates.

doi:10.4169/amer.math.monthly.118.03.195

Project NExT is the MAA's widely acclaimed professional development opportunity for new or recent Ph.D.'s. Joe has been involved with Project NExT since its first summer in 1994 when he gave the closing address. The address was so extraordinarily successful that he has given each subsequent closing address. Later, when Joe became co-director of Project NExT in 1998, he assumed primary responsibility for many parts of the program, participated in developing the workshop program, and often drafted articles for *Focus* and reports to the Board of Governors. His boundless energy, enthusiasm, mathematical sophistication, and academic savvy have made him the perfect person to work with the hundreds of new mathematics faculty who have become Project NExT Fellows.

Joe's Project NExT work illustrates that his service to mathematics ranges across all the levels of work that needs to be done. Not only does Joe participate in long-range planning and vision discussions, but he also does the small tasks that keep a program functioning successfully. As with his REU, Joe does not treat Project NExT as a job for which he has specified, narrowly defined duties, but as a program to which he generously gives his time and to whose success he is committed.

In his talks, Joe combines thorough preparation, imaginative presentation, and a showman's flair with solid mathematical content. An indication of Joe's success at communicating mathematics was a standing ovation from the audience at his Pi Mu Epsilon Frame Lecture. This audience included high school students as well as professors, and all understood and were excited with Joe's talk. Joe has given 24 addresses at national meetings, 65 at MAA Section meetings, and over 200 at colleges and universities. Joe also communicates mathematics beyond the mathematical community. Articles about his work have appeared in twenty-five news outlets in the United States as well as in Europe and India. Four of these were in *Science News* and one in the *New York Times*. In addition to this he has more than a 100 articles in mathematical journals and other publications including *Math Horizons*, the *Macmillan Encyclopedia of Chemistry*, and the *Mathematical Intelligencer*. Joe Gallian was named by a Duluth newspaper as one of the "100 Great Duluthians of the 20th Century."

Joe has served professional organizations and the mathematical community at large. Joe has been national coordinator for Mathematics Awareness Month (2003 and 2010); he has served on more than 50 national committees, chairing at least 10 of them; he was a Council on Undergraduate Research Councilor for 11 years, serving as chair of the mathematics and computer science division for part of that time; he has served as associate editor for *Mathematics Magazine* and the *American Mathematical Monthly*; and he has been director or co-director of five conferences. Joe has refereed for 40 journals and is a reviewer for NSF, the Research Council of Canada, and the Australian Research Council. Those who work with Joe know that he is always an active contributor to a project in which he is involved—he is efficient and he moves the project along.

Joe Gallian's many awards and honors attest to his passion to serve undergraduates, professional organizations, and the mathematical community. He has been honored with teaching awards from the University of Minnesota Duluth, the Carnegie Foundation for the Advancement of Teaching, and the Mathematical Association of America (Haimo Award). Joe has received the MAA's Trevor Evans and Carl B. Allendoerfer Awards and has been an MAA Polya Lecturer. Joe served as second vice president and then president of the MAA.

Joe completed his undergraduate degree at Slippery Rock University, M.A. at the University of Kansas, and Ph.D. at Notre Dame. He is a professor of mathematics and statistics at the University of Minnesota Duluth, where he was recognized in December 2009 with the Chancellor's Award for Distinguished Research.

About the Gung-Hu Award. The Yueh-Gin Gung and Dr. Charles Y. Hu Award for Distinguished Service to Mathematics is the successor to the Association's Award for Distinguished Service to Mathematics, first presented in 1962. It is intended to be the most prestigious award for service offered by the Association. The initial endowment was contributed by husband and wife Dr. Charles Y. Hu and Yueh-Gin Gung. Dr. Hu and Yueh-Gin Gung were not mathematicians, but rather a professor of geography at the University of Maryland and a librarian at the University of Chicago, respectively. They contributed generously to our discipline because, as they wrote, "We always have high regard and great respect for the intellectual agility and high quality of mind of mathematicians and consider mathematics as the most vital field of study in the technological age we are living in."

The Essence of Mathematics . . .

"The essence of mathematics is accuracy."

Walter Bagehot, *The Works of Walter Bagehot*, Vol. V,
The Travelers Insurance Company, Hartford, CT, 1891, p. 457.

"The essence of mathematics is exact truthfulness."

Ellery W. Davis, The Condition of Secondary Mathematical Instruction
With Some Hints to Remedies, *Mathematical Supplement
of School Science*, Vol. 1, No. 1, 1903, p. 8.

"The essence of mathematics lies precisely in its freedom."

Georg Cantor, Ueber unendliche, lineare Punktmannichfaltigkeiten,
Mathematische Annalen **21** (1883) 564.