

AMS Prizes and Awards NEW! I. Martin Isaacs Prize for Excellence in Mathematical Writing



The I. Martin Isaacs Prize is awarded for excellence in writing of a research article published in a primary journal of the AMS in the past two years.

About this Prize

The prize focuses on the attributes of excellent writing, including clarity, grace, and accessibility; the quality of the research is implied by the article's publication in *Communications*

I. Martin Isaacs

of the AMS, Journal of the AMS, Mathematics of Computation, Memoirs, Proceedings of the AMS, or Transactions of the AMS, and is therefore not a prize selection criterion.

Professor Isaacs is the author of several graduate-level textbooks and of about 200 research papers on finite groups and their characters, with special emphasis on groups—such as solvable groups—that have an abundance of normal subgroups. He is a Fellow of the American Mathematical Society, and received teaching awards from the University of Wisconsin and from the School of Engineering at the University of Wisconsin. He is especially proud of his 29 successful PhD students.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination describing the candidate's accomplishments including complete bibliographic citations for the work being nominated, a CV for the nominee, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/isaacs-prize.

NEW! Elias M. Stein Prize for Transformative Exposition



The Elias M. Stein Prize for Transformative Exposition is awarded for a written work, such as a book, survey, or exposition, *in any area of mathematics* that transforms the mathematical community's understanding of the subject or reshapes the way it is taught.

Elias M. Stein

About this Prize

This prize was endowed in 2022 by students, colleagues, and friends of Elias M. Stein to honor his remarkable legacy of writing monographs and textbooks, both singly and with collaborators. Stein's research monographs, such as Singular Integrals and Differentiability Properties of Functions and Harmonic Analysis, became canonical references for generations of researchers, and textbooks such as the Stein and Shakarchi series Princeton Lectures in Analysis became instant classics in undergraduate and graduate classrooms. Stein is remembered for his ability to find a perspective to make a method of proof seem so natural as to be inevitable, and for his strategy of revealing the essential difficulties, and their solutions, in the simplest possible form before elaborating on more general settings. This prize seeks to recognize mathematicians at any career stage who, like Stein, have invested in writing a book or manuscript that transforms how their research community, or the next generation, understands the current state of knowledge in their area.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination describing the candidate's accomplishments including complete bibliographic citations for the work being nominated, a CV for the nominee, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/stein-exposition.

Ivo and Renata Babuška Thesis Prize

The Ivo and Renata Babuška Thesis Prize is awarded annually to the author of an outstanding PhD thesis in mathematics, interdisciplinary in nature, possibly with applications to other fields. The current prize amount is US\$3,000.

About this Prize

Ivo Babuška (1926–2023) was a Czech-American mathematician whose honors include five doctorates honoris causa, the Czechoslovak State Prize for Mathematics, the Leroy P. Steele Prize, the Birkhoff Prize, the Humboldt Award of Federal Republic of Germany, the John von Neumann Medal, the Neuron Prize Czech Republic, the ICAM Congress Medal (Newton Gauss), the Bolzano Medal, and the Honorary Medal De Scientia Et Humanitate Optime Meritis. Asteroid 36060 Babuška was named in his honor by the International Astronomical Union.

Renata Babuška (nee Mikulášek) was Ivo's wife and partner for 63 years. Renata grew up in Prague, Czechoslovakia and graduated from Charles University in 1953 with a degree in mathematical statistical engineering. Upon graduation, she was assigned to the Education Department as an administrator evaluating universities and technical schools. Two years later she became an assistant professor of mathematics at the Czech Technical University. After moving to the US, Renata worked as a data and computing management consultant for different government agencies in Washington, DC. She liked to point out that behind every successful man is a strong woman and he often said that without Renata, he would not have accomplished all that he did.

Babuška was a Distinguished Professor at the University of Maryland at College Park and then the Robert B. Trull Chair in Engineering, TICAM senior research scientist, professor of aerospace engineering and engineering mechanics, and professor of mathematics at the University of Texas, Austin. He was a Fellow of SIAM, ACM, and ICAM; a member of the US National Academy of Engineering, the Academy of Medicine, Engineering, and Sciences of Texas, and the European Academy of Sciences; and an honorary foreign member of the Czech Learned Society.

Babuška's work spanned the fields of theoretical and applied mathematics with emphasis on numerical methods, finite element methods, and computational mechanics. His interest in fostering collaboration among mathematicians, engineers, and physicists led him to establish this prize to encourage and recognize interdisciplinary work with practical applications. The Ivo and Renata Babuška Thesis Prize is awarded in line with other AMS prizes and awards, according to governance rules and practice in effect at that time.

Next Prize: January 2025

Nomination Period: February 1–June 30

Nomination Procedure:

- 1. The prize will recognize a thesis for a PhD granted between July 1 of year -1 and June 30 of year 0 (the year of nomination and selection) and will be presented at the Joint Mathematics Meetings in January of year +1 wherever it appears.
- 2. The nominating institution will be a PhD-granting institution that is either (a) located in the United States of America (USA), or (b) located outside the USA and an institutional AMS member at the time of the nomination.
- 3. One PhD thesis may be nominated by a nominating institution.
- 4. The nominating institution will submit a copy of the thesis along with a letter in support of the nomination, and both will be written in English.
- 5. A selection committee will be appointed by the AMS president.

https://www.ams.org/babuska

Mary P. Dolciani Prize for Excellence in Research

The AMS Mary P. Dolciani Prize for Excellence in Research recognizes a mathematician from a department that does not grant a PhD who has an active research program in mathematics and a distinguished record of scholarship. The primary criterion for the prize is an active research program as evidenced by a strong record of peer-reviewed publications.

Additional selection criteria may include the following:

- Evidence of a robust research program involving undergraduate students in mathematics;
- Demonstrated success in mentoring undergraduates whose work leads to peer-reviewed publication, poster presentations, or conference presentations;
- Membership in the AMS at the time of nomination and receipt of the award is preferred but not required.

About this Prize

This prize is funded by a grant from the Mary P. Dolciani Halloran Foundation. Mary P. Dolciani Halloran (1923–1985) was a gifted mathematician, educator, and author. She devoted her life to developing excellence in

mathematics education and was a leading author in the field of mathematical textbooks at the college and secondary school levels.

The prize amount is \$5000, awarded every other year for five award cycles.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Nominations should include a letter of nomination, the nominee's CV, and a short citation to be used in the event that the nomination is successful.

Information on how to nominate can be found here: https://www.ams.org/dolciani-prize.

Award for an Exemplary Program or Achievement in a Mathematics Department

This award recognizes a department which has distinguished itself by undertaking an unusual or particularly effective program of value to the mathematics community, internally or in relation to the rest of society. Examples might include a department that runs a notable minority outreach program, a department that has instituted an unusually effective industrial mathematics internship program, a department that has promoted mathematics so successfully that a large fraction of its university's undergraduate population majors in mathematics, or a department that has made some form of innovation in its research support to faculty and/or graduate students, or which has created a special and innovative environment for some aspect of mathematics research.

About this Award

This award was established in 2004. For the first three awards (2006–2008), the prize amount was US\$1,200. The prize was endowed by an anonymous donor in 2008, and starting with the 2009 prize, the amount is US\$5,000. This US\$5,000 prize is awarded annually. Departments of mathematical sciences in North America that offer at least a bachelor's degree in mathematical sciences are eligible.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: A letter of nomination may be submitted by one or more individuals. Nomination of the writer's own institution is permitted. The letter should describe the specific program(s) for which the department in being nominated as well as the achievements which make the program(s) an outstanding success, and may include any ancillary documents which support the success of the program(s). Where possible, the letter and documentation should address how these successes came about by 1) systematic, reproducible changes in programs that might be implemented by others, and/or 2) have value outside the mathematical community. The letter should not exceed two pages, with supporting documentation not to exceed an additional three pages.

Information on how to nominate can be found here: https://www.ams.org/department-award.

Award for Impact on the Teaching and Learning of Mathematics

This award is given annually to a mathematician (or group of mathematicians) who has made significant contributions of lasting value to mathematics education.

Priorities of the award include recognition of:

- (a) accomplished mathematicians who have worked directly with precollege teachers to enhance teachers' impact on mathematics achievement for all students, or
- (b) sustainable and replicable contributions by mathematicians to improving the mathematics education of students in the first two years of college.

About this Award

The Award for Impact on the Teaching and Learning of Mathematics was established by the AMS Committee on Education in 2013. The endowment fund that supports the award was established in 2012 by a contribution from Kenneth I. and Mary Lou Gross in honor of their daughters Laura and Karen.

The US\$1,000 award is given annually.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Letters of nomination may be submitted by one or more individuals. The letter of nomination should describe the significant contributions made by the nominee(s) and provide evidence of the impact these contributions have made on the teaching and learning of mathematics. The letter of nomination should not exceed two pages, and may include supporting documentation not to exceed three additional pages. A brief curriculum vitae for each nominee should also be included. The nonwinning nominations will automatically be reconsidered, without further updating, for the awards to be presented over the next two years.

Information on how to nominate can be found here: https://www.ams.org/impact.

Ciprian Foias Prize in Operator Theory

The Ciprian Foias Prize in Operator Theory is awarded for notable work in Operator Theory published during the preceding six years. The work must be published in a recognized, peer-reviewed venue.

About this Prize

This prize was established in 2020 in memory of Ciprian Foias (1933–2020) by colleagues and friends. He was an influential scholar in operator theory and fluid mechanics, a generous mentor, and an enthusiastic advocate of the mathematical community.

The current prize amount is US\$5,000, and the prize is awarded every three years.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Nominations require CV of the nominee, a letter of nomination, and a citation.

Information on how to nominate can be found here: https://www.ams.org/foias-prize.

David P. Robbins Prize

The Robbins Prize is for a paper with the following characteristics: it shall report on novel research in algebra, combinatorics, or discrete mathematics and shall have a significant experimental component; and it shall be on a topic which is broadly accessible and shall provide a simple statement of the problem and clear exposition of the work. Papers published within the six calendar years preceding the year in which the prize is awarded are eligible for consideration.

About this Prize

This prize was established in 2005 in memory of David P. Robbins by members of his family. Robbins, who died in 2003, received his PhD in 1970 from MIT. He was a longtime member of the Institute for Defense Analysis Center for Communications Research and a prolific mathematician whose work (much of it classified) was in discrete mathematics.

The current prize amount is US\$5,000 and the prize is awarded every 3 years.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination, a complete bibliographic citation for the work being nom-

inated, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/robbins-prize.

E. H. Moore Research Article Prize

The Moore Prize is awarded for an outstanding research article to have appeared in one of the AMS primary research journals (namely, the *Journal of the AMS, Proceedings* of the AMS, Transactions of the AMS, Memoirs of the AMS, Mathematics of Computation, Electronic Journal of Conformal Geometry and Dynamics, and Electronic Journal of Representation Theory) during the six calendar years ending a full year before the meeting at which the prize is awarded.

About this Prize

The prize was established in 2002 in honor of E. H. Moore. Among other activities, Moore founded the Chicago branch of the American Mathematical Society, served as the Society's sixth president (1901–1902), delivered the Colloquium Lectures in 1906, and founded and nurtured the *Transactions of the AMS*.

The current prize amount is US\$5,000, awarded every three years.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination, a complete bibliographic citation for the work being nominated, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/moore-prize.

Levi L. Conant Prize

This prize was established in 2000 in honor of Levi L. Conant to recognize the best expository paper published in either the *Notices of the AMS* or the *Bulletin of the AMS* in the preceding five years.

About this Prize

Levi L. Conant was a mathematician and educator who spent most of his career as a faculty member at Worcester Polytechnic Institute. He was head of the mathematics department from 1908 until his death and served as interim president of WPI from 1911 to 1913. Conant was noted as an outstanding teacher and an active scholar. He published a number of articles in scientific journals and wrote four

textbooks. His will provided for funds to be donated to the AMS upon the death of his wife.

Prize winners are invited to present a public lecture at Worcester Polytechnic Institute as part of their Levi L. Conant Lecture Series, which was established in 2006.

The Conant Prize is awarded annually in the amount of US\$1,000.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Nominations with supporting information should be submitted online. Nominations should include a letter of nomination, a short description of the work that is the basis of the nomination a complete bibliographic citation for the article being nominated.

Information on how to nominate can be found here: https://www.ams.org/conant-prize.

Mathematics Programs that Make a Difference

This Award for Mathematics Programs that Make a Difference was established in 2005 by the AMS's Committee on the Profession to compile and publish a series of profiles of programs that:

- 1. aim to bring more persons from underrepresented backgrounds into some portion of the pipeline beginning at the undergraduate level and leading to advanced degrees in mathematics and professional success, or retain them once in the pipeline;
- 2. have achieved documentable success in doing so; and
- 3. are potentially replicable models.

About this Award

This award brings recognition to outstanding programs that have successfully addressed the issues of underrepresented groups in mathematics. Examples of such groups include racial and ethnic minorities, women, low-income students, and first-generation college students.

One program is selected each year by a selection committee appointed by the AMS president and is awarded US\$1,000 provided by the Mark Green and Kathryn Kert Green Fund for Inclusion and Diversity.

Preference is given to programs with significant participation by underrepresented minorities. Note that programs aimed at pre-college students are eligible only if there is a significant component of the program benefiting individuals from underrepresented groups at or beyond the undergraduate level. Nomination of one's own institution or program is permitted and encouraged.

Next Prize: January 2025

Nomination Period: February 1–May 31

Nomination Procedure: The letter of nomination should describe the specific program being nominated and the achievements that make the program an outstanding success. It should include clear and current evidence of that success. A strong nomination typically includes a description of the program's activities and goals, a brief history of the program, evidence of its effectiveness, and statements from participants about its impact. The letter of nomination should not exceed two pages, with supporting documentation not to exceed three more pages. Up to three supporting letters may be included in addition to these five pages. Nomination of the writer's own institution or program is permitted. Nonwinning nominations will automatically be reconsidered for the award for the next two years.

Information on how to nominate can be found here: https://www.ams.org/make-a-diff-award.

Oswald Veblen Prize in Geometry

The award is made for a notable research work in geometry or topology that has appeared in the last six years. The work must be published in a recognized, peer-reviewed venue.

About this Prize

This prize was established in 1961 in memory of Professor Oswald Veblen through a fund contributed by former students and colleagues. The fund was later doubled by the widow of Professor Veblen. An anonymous donor generously augmented the fund in 2008. In 2013, in honor of her late father, John L. Synge, who knew and admired Oswald Veblen, Cathleen Synge Morawetz and her husband, Herbert, substantially increased the endowment.

The current prize amount of US\$5,000 is awarded every three years.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination, a complete bibliographic citation for the work being nominated, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/Veblen-prize.

Ruth Lyttle Satter Prize in Mathematics

The Satter Prize recognizes an outstanding contribution to mathematics research by a woman in the previous six years.

About this Prize

This prize was established in 1990 using funds donated by Joan S. Birman in memory of her sister, Ruth Lyttle Satter. Professor Birman requested that the prize be established to honor her sister's commitment to research and to encourage women in science. An anonymous benefactor added to the endowment in 2008.

The current prize amount is \$5,000 and the prize is awarded every 2 years.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination describing the candidate's accomplishments including complete bibliographic citations for the work being nominated, a CV for the nominee, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/satter-prize.

Joint Prizes and Awards

Frank and Brennie Morgan Prize for Outstanding Research in Mathematics by an Undergraduate Student

(AMS-MAA-SIAM)

The Morgan Prize is awarded each year to an undergraduate student (or students for joint work) for outstanding research in mathematics. Any student who was enrolled as an undergraduate in December at a college or university in the United States or its possessions, Canada, or Mexico is eligible for the prize.

The prize recipient's research need not be confined to a single paper; it may be contained in several papers. However, the paper (or papers) to be considered for the prize must be completed while the student is an undergraduate. Publication of research is not required.

About this Prize

The prize was established in 1995. It is entirely endowed by a gift from Mrs. Frank (Brennie) Morgan. It is made jointly by the American Mathematical Society, the Mathematical Association of America, and the Society for Industrial and Applied Mathematics.

The current prize amount is \$1,200, awarded annually.

Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: To nominate a student, submit a letter of nomination, a brief description of the work that is the basis of the nomination, and complete bibliographic citations (or copies of unpublished work). All submissions for the prize must include at least one letter of support from a person, usually a faculty member, familiar with the student's research.

Information on how to nominate can be found here: https://www.ams.org/morgan-prize.

JPBM Communications Award

This award is given each year to reward and encourage communicators who, on a sustained basis, bring mathematical ideas and information to non-mathematical audiences.

About this Award

This award was established by the Joint Policy Board for Mathematics (JPBM) in 1988. JPBM is a collaborative effort of the American Mathematical Society, the Mathematical Association of America, the Society for Industrial and Applied Mathematics, and the American Statistical Association.

Up to two awards of US\$2,000 are made annually. Both mathematicians and non-mathematicians are eligible.

Next Prize: January 2025

Nomination Period: open

Nomination Procedure: Nominations should be submitted on mathprograms.org. Note: Nominations collected before September 15th in year N will be considered for an award in year N+2.

Information on how to nominate can be found here: https://www.ams.org/jpbm-comm-award.

AMS-SIAM Norbert Wiener Prize in Applied Mathematics

The Wiener Prize is awarded for an outstanding contribution to "applied mathematics in the highest and broadest sense."

About this Prize

This prize was established in 1967 in honor of Professor Norbert Wiener and was endowed by a fund from the Department of Mathematics of the Massachusetts Institute of Technology. The endowment was further supplemented by a generous donor.

Since 2004, the US\$5,000 prize has been awarded every three years. The American Mathematical Society and the Society for Industrial and Applied Mathematics award this prize jointly; the recipient must be a member of one of these societies. Next Prize: January 2025

Nomination Period: February 1-May 31

Nomination Procedure: Submit a letter of nomination describing the candidate's accomplishments including complete bibliographic citations for the work being nominated, a CV for the nominee, and a brief citation that explains why the work is important.

Information on how to nominate can be found here: https://www.ams.org/wiener-prize.

Credits

Photo of I. Martin Isaacs is courtesy of Yvonne Nagel.

Photo of Elias M. Stein is courtesy of William Crow/Princeton University.

