



AMS Prizes & Awards

NEW! Ivo and Renata Babuška Thesis Prize

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

About this Prize

Ivo Babuška is 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 is 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, the European Academy of Sciences, and an honorary Foreign Member of the Czech Learned Society.

Babuška's work spans 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: Inaugural Prize January 2024

Nomination Period: 1 February – 31 May 2023

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 and will be presented at the Joint Mathematics Meetings in January of year +1.
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.

To make a nomination go to <https://www.ams.org/babuska-prize>.

NEW! The Elias M. Stein Prize for New Perspectives in Analysis

The Elias M. Stein Prize for New Perspectives in Analysis is awarded for the development of groundbreaking methods in analysis which demonstrate promise to revitalize established areas or create new opportunities for mathematical discovery. The current prize amount is US\$5,000 and the prize is awarded every three years for work published in the preceding six years.

About this Prize

This prize was endowed in 2022 by students, colleagues, and friends of Elias M. Stein to honor his remarkable legacy in the area of mathematical analysis. Stein is remembered for identifying many deep principles and methods which transcend their original context, and for opening entirely new areas of research which captivated the attention and imagination of generations of analysts. This prize seeks to recognize mathematicians at any career stage who, like Stein, have found exciting new avenues for mathematical exploration in subjects old or new or made deep insights which demonstrate promise to reshape thinking across areas.

Next Prize: Inaugural Prize January 2024

Nomination Period: 1 February – 30 June 2023

Nomination Procedure: Nominations can be submitted between February 1 and June 30. Nominations should include a letter of nomination and a brief citation to be used in the event that the nomination is successful.

To make a nomination go to <https://www.ams.org/stein-prize>.

Leroy P. Steele Prize for Lifetime Achievement

About this Prize

The Steele Prize for Lifetime Achievement is awarded for the cumulative influence of the total mathematical work of the recipient, high level of research over a period of time, particular influence on the development of a field, and influence on mathematics through PhD students. The amount of this prize is US\$10,000.

Next Prize: January 2024

Nomination Period: 1 February – 31 March 2023

Nomination Procedure: <https://www.ams.org/steele-prize>

Nominations can be submitted between February 1 and March 31. Nominations for the Steele Prizes for Lifetime Achievement 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. Nominations will remain active and receive consideration for three consecutive years.

Leroy P. Steele Prize for Mathematical Exposition

About this Prize

The Steele Prize for Mathematical Exposition is awarded for a book or substantial survey or expository research paper. The amount of this prize is US\$5,000.

Next Prize: January 2024

Nomination Period: 1 February – 31 March 2023

Nomination Procedure: <https://www.ams.org/steele-prize>

Nominations can be submitted between February 1 and March 31. Nominations for the Steele Prizes for Mathematical Exposition should include a letter of nomination, a complete bibliographic citation for the work being nominated, and a brief citation to be used in the event that the nomination is successful. Nominations will remain active and receive consideration for three consecutive years.

Leroy P. Steele Prize for Seminal Contribution to Research

About this Prize

The Steele Prize for Seminal Contribution to Research is awarded for a paper, whether recent or not, that has proved to be of fundamental or lasting importance in its field, or a model of important research.

Special Note: The Steele Prize for Seminal Contribution to Research is awarded according to the following six-year rotation of subject areas:

1. Open (2025)
2. Analysis/Probability (2026)
3. Algebra/Number Theory (2027)
4. Applied Mathematics (2028)
5. Geometry/Topology (2029)
6. Discrete Mathematics/Logic (2024)

Next Prize: January 2024

Nomination Period: 1 February – 31 March 2023

Nomination Procedure: <https://www.ams.org/steele-prize>

Nominations can be submitted between February 1 and March 31. Nominations for the Steele Prizes for Seminal Contribution to Research should include a letter of nomination, a complete bibliographic citation for the work being nominated, and a brief citation to be used in the event that the nomination is successful.

Chevalley Prize in Lie Theory

The Chevalley Prize is awarded for notable work in Lie theory published during the preceding six years; a recipient should be at most twenty-five years past the PhD.

About this Prize

The Chevalley Prize was established in 2014 by George Lusztig to honor Claude Chevalley (1909–1984). Chevalley was a founding member of the Bourbaki group. He made fundamental contributions to class field theory, algebraic geometry, and group theory. His three-volume treatise on Lie groups served as standard reference for many decades. His classification of semisimple groups over an arbitrary algebraically closed field provides a link between Lie's theory of continuous groups and the theory of finite groups, to the enormous enrichment of both subjects.

The current prize amount is US\$8,000, awarded in even-numbered years, without restriction on society membership, citizenship, or venue of publication.

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

Nomination Procedure: Submit a letter of nomination, complete bibliographic citations for the work being

nominated, and a brief citation that might be used in the event that the nomination is successful.

To make a nomination go to <https://www.ams.org/chevalley-prize>.

Frank Nelson Cole Prize in Algebra

This prize recognizes a notable research work in algebra that has appeared in the last six years. The work must be published in a recognized, peer-reviewed venue.

About this Prize

This prize (and the Frank Nelson Cole Prize in Number Theory) was founded in honor of Professor Frank Nelson Cole upon his retirement after twenty-five years as secretary of the American Mathematical Society. Cole also served as editor-in-chief of the *Bulletin* for twenty-one years. The original fund was donated by Professor Cole from moneys presented to him on his retirement, and was augmented by contributions from members of the Society. The fund was later doubled by his son, Charles A. Cole, and supported by family members. It has been further supplemented by George Lusztig and by an anonymous donor.

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

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

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.

To make a nomination go to <https://www.ams.org/cole-prize-algebra>.

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 2024

Nomination Period: 1 February – 31 May 2023

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, and a complete bibliographic citation for the article being nominated.

To make a nomination go to <https://www.ams.org/conant-prize>.

Ulf Grenander Prize in Stochastic Theory and Modeling

The Grenander Prize recognizes exceptional theoretical and applied contributions in stochastic theory and modeling. It is awarded for seminal work, theoretical or applied, in the areas of probabilistic modeling, statistical inference, or related computational algorithms, especially for the analysis of complex or high-dimensional systems.

About this Prize

This prize was established in 2016 by colleagues of Ulf Grenander (1923–2016). Professor Grenander was an influential scholar in stochastic processes, abstract inference, and pattern theory. He published landmark works throughout his career, notably his 1950 dissertation, *Stochastic Processes and Statistical Interference* at Stockholm University, *Abstract Inference*, his seminal *Pattern Theory: From representation to inference*, and *General Pattern Theory*. A long-time faculty member of Brown University's Division of Applied Mathematics, Grenander received many honors. He was a Fellow of the American Academy of Arts and Sciences and the National Academy of Sciences and was a member of the Royal Swedish Academy of Sciences.

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

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

Nomination Procedure: To make a nomination go to <https://www.ams.org/grenander-prize>.

Bertrand Russell Prize

About this Prize

The Bertrand Russell Prize of the AMS was established in 2016 by Thomas Hales. The prize looks beyond the confines of the profession to research or service contributions of mathematicians or related professionals to promoting good in the world. It recognizes the various ways that mathematics furthers fundamental human values. Mathematical contributions that further world health, our understanding of climate change, digital privacy, or education in developing countries are some examples of the type of work that might be considered for the prize.

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

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

Nomination Procedure: Include a short description of the work that is the basis of the nomination, including complete bibliographic citations. A curriculum vitae should be included.

To make a nomination go to <https://www.ams.org/russell-prize>.

Albert Leon Whiteman Memorial Prize

The Whiteman Prize recognizes notable exposition and exceptional scholarship in the history of mathematics.

About this Prize

This prize was established in 1998 using funds donated by Mrs. Sally Whiteman in memory of her husband, Albert Leon Whiteman.

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

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

Nomination Procedure: Include a short description of the work that is the basis of the nomination, including complete bibliographic citations. A curriculum vitae should be included.

To make a nomination go to <https://www.ams.org/whiteman-prize>.

Award for Distinguished Public Service

The Award for Distinguished Public Service recognizes a research mathematician who has made recent or sustained distinguished contributions to the mathematics profession through public service.

About this Award

The AMS Council established this award in response to a recommendation from its Committee on Science Policy.

The US\$4,000 award is presented every two years.

Next Award: January 2024

Nomination Period: 1 February – 31 May 2023

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

To make a nomination go to <https://www.ams.org/public-service-award>.

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 Award: January 2024

Nomination Period: 1 February – 31 May 2023

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 is 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 1) came about by 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.

To make a nomination go to <https://www.ams.org/department-award>.

Award for Mathematics Programs that Make a Difference

The 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 Award: January 2024

Nomination Period: 1 February – 31 May 2023

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. Non-winning nominations will automatically be reconsidered for the award for the next two years.

To make a nomination go to <https://www.ams.org/make-a-diff-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 pre-college 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 Award: January 2024

Nomination Period: 1 February – 31 May 2023

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 non-winning nominations will automatically be reconsidered, without further updating, for the awards to be presented over the next two years.

To make a nomination go to <https://www.ams.org/impact>.

Fellowships

Fellows of the American Mathematical Society

The Fellows of the American Mathematical Society program recognizes members who have made outstanding contributions to the creation, exposition, advancement, communication, and utilization of mathematics.

AMS members may be nominated for this honor during the nomination period which occurs in February and March each year. Selection of new Fellows (from among those nominated) is managed by the AMS Fellows Selection Committee, comprised of twelve members of the AMS who are also Fellows. Those selected are subsequently invited

to become Fellows and the new class of Fellows is publicly announced each year on November 1.

Learn more about the qualifications and process for nomination at <https://www.ams.org/ams-fellows>.

Joint Prizes & Awards

George David Birkhoff Prize in Applied Mathematics (AMS-SIAM)

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

About this Prize

The prize was established in 1967 in honor of Professor George David Birkhoff, with an initial endowment contributed by the Birkhoff family and subsequent additions by others. The American Mathematical Society (AMS) and the Society for Industrial and Applied Mathematics (SIAM) award the Birkhoff Prize jointly.

The current prize amount is US\$5,000, awarded every three years to a member of AMS or SIAM.

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

Nomination Procedure: To make a nomination go to <https://www.ams.org/birkhoff-prize>.

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 US\$1,200, awarded annually.

Next Prize: January 2024

Nomination Period: 1 February – 31 May 2023

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.

To make a nomination go to <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 2024

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 $N+2$.