



State of the AMS

Report of the Executive Director



As AMS Executive Director, my job is to manage and coordinate all Society operations and serve as the primary liaison between staff and volunteer bodies that govern the Society. In this report, I'll describe AMS activities and accomplishments from 2021. The mission of the AMS is to advance research and we do this mainly through conferences and publications. We also have a range of professional programs and services, and we advocate in DC on behalf of our mathematics community.

The AMS budget typically increases each year, although in 2021 we budgeted lower than the prior year in anticipation of negative impacts related to the COVID-19 pandemic. Nonetheless, the AMS was able to continue its practice of ending the year on a positive financial note, details of which will appear in a future issue of the *Notices*. We returned to our usual practice in 2022 with an increased budget of approximately \$33 million. Our primary revenue sources are derived from library subscriptions to AMS products such as MathSciNet® and our research journals. Our endowment, currently valued at about \$230 million, funds our many prizes and awards and provides operating income that supports a wide variety of professional programs and activities. We also receive membership dues, conference registration fees, and income from selling our books. Did you know that purchasing books directly from the AMS Bookstore (<https://bookstore.ams.org>) will both save you money and increase the amount that comes to the AMS over purchasing elsewhere?

All of our income, along with donation and grant support, helps us advance research and support the mathematics profession. We achieve this through AMS meetings and conferences, a multitude of AMS programs, our member journals, *Bulletin* and *Notices*, as well as our DC-based advocacy work. We have a robust development program to help raise funds for new prizes and awards and to further

Credit: Mike Nyman Photography

Catherine A. Roberts, Executive Director

support initiatives of the Society. The budget for the AMS each year follows several key principles, including that we apply our revenue to keep our fees low. Did you know that the AMS subsidizes membership benefits, AMS conferences, and more in order to help keep prices low so as to benefit as many people as possible? Indeed, we publish books when we believe they will be of value to the mathematics community, even as we recognize that some may not be commercially viable. Our DC-based advocacy work ensures the voices and values of our community are represented on many important issues and is completely paid for by the AMS. Did you know that 70% of federal funding for mathematics comes from the National Science Foundation? We work with other scientific societies and Congress to increase support for the NSF, which helps advance research across our discipline. Indeed, in 2021, our AMS Director of Government Relations made some 75 visits with Congressional offices, many times accompanied by other mathematicians. This is vastly more than in preceding years, which was made possible because these were all virtual meetings due to the pandemic.

There have been several significant donations to the AMS in 2021 and I'll mention just a few here. One donor has agreed to underwrite a new translation effort to make widely available historically important transcripts of mathematics lectures from the University of Göttingen. The AMS received a pledge of \$750,000 from another donor to support our BEGIN (Business, Entrepreneurial, Government, Industry, and Non-profit sectors) initiative, which will enhance employment connections for mathematicians outside of academia. We learned recently that we will receive an unrestricted bequest of roughly \$3 million from the estate of a donor. Generous gifts such as these are testaments to the confidence our many donors have in the long-term mission and values of the AMS. Have you ever thought about contributing to a fund at the AMS in support of mathematics? If you have thoughts about helping the AMS enhance its ability to increase our prizes, awards, programs, and activities and would like to have a conversation with me, please reach out at croberts@ams.org.

It seems the pandemic affected just about everything at the AMS. And even today, we recognize that our work and mission have been impacted in ways we don't yet fully understand. AMS staff had to figure out how to accomplish our goals working from home. We replaced office desktop computers with portable laptops. We implemented cloud storage, sharing of files, and new collaboration tools. As an unsurprising sign of the times, the AMS undertook multiple security-related projects. This included software upgrades, addressing issues of external network penetration and web application scans, and upgrading our internal network.

Perhaps most notably, the entire Mathematical Reviews pipeline was converted from paper to digital during the first months of the pandemic. This herculean task continued

throughout 2021 as this conversion has enabled us to update the Mathematical Reviews database itself, opening the door to a greater variety of future enhancements to MathSciNet.

In July 2021, employees started to return to our AMS office buildings part time (although I'll note that our printing and distribution center maintained in person operations throughout the pandemic). Our DC office completed its move from Dupont Circle to its new location within blocks of the US Capitol building. The space is spectacular for hosting AMS committee meetings, as well as convenings of other small groups. Did you know that if you contact us ahead of time, we can help arrange for you to meet members of your Congressional delegation and we can coach you on how to have an effective visit? We hope you will visit when you are in the area!

In the fall, as the pandemic threat lessened (and prior to the omicron variant that shut everything down again), three of Council's policy committees, as well as a meeting of the Executive Committee of the Council and the Board of Trustees (ECBT), were able to be held in person. The AMS organized an in-person Congressional briefing in December with the Mathematical Sciences Research Institute. It was one of the first such briefings in Congress in two years, and it was exciting to have mathematicians initiate the resumption of this important advocacy program in Congress. Dr. Cédric Villani spoke about *Mitigating climate change: science and policy*. Sadly, the resurgence of the pandemic at the end of 2021 forced us to postpone the in-person JMM 2022 and to offer it in a virtual format three months later. Throughout the two years of the pandemic, however, we successfully maintained one of our signature programs, the Mathematics Research Communities (MRCs) using virtual tools. We also ran several virtual sectional meetings, workshops, and webinars. We are now thinking deeply about how to engage our community of mathematicians effectively as we emerge from the pandemic. What are your ideas?

One of the most complex projects in 2021 involved finalizing plans for the reimagined Joint Mathematics Meetings¹ (JMM). In response to the AMS Council affirming that the JMM would be welcoming to all mathematicians, the Secretariat created a new expanded abstract proposal classification scheme² so as to permit a much wider range of topics. We introduced several new lectures, receptions, and other events. We created memoranda of understanding with our dozen (and growing!) partners. Our team rebranded the JMM with a new logo and developed promotional materials including emails, flyers, social media campaigns, signage, as well as the app and website. The new JMM Program Committee reviewed panel proposals and initiated

¹<https://www.jointmathematicsm Meetings.org>

²<https://www.ams.org/session-classifications>

a series of professional development opportunities called PEPs (Professional Enhancement Programs) in response to community feedback requesting more such programming. A communications campaign to introduce our partnership model and program additions has generated tremendous excitement. Will you join us in Boston in January 2023?

Significant advancements occurred in the publishing arena at the AMS in 2021. In October, *Communications of the AMS*, our brand new diamond open access primary journal, debuted its first article. The Mathematical Reviews database now has over 4 million items, having added a record number of new items (137,576) in 2021. Library subscriptions to MathSciNet remain stable, and use of the database continues to grow. In fact, MathSciNet had its busiest year ever in 2021, which continues the trend of an average increase in usage of over 9% per year over the previous five years. So, even with the pandemic, MathSciNet continues to be relied upon heavily worldwide. We published 75 new books, many of them research monographs. We have also made progress on accessibility to our content across our books and journals. For example, all 39 of the 2021 feature articles in *Notices of the AMS* were converted to HTML, which is an important step in our efforts to improve reader accessibility.

Next, some people news. In 2021 we on-boarded and supported several new members of governance and staff. In 2021, this included Dr. Doug Ulmer, Treasurer, Dr. Boris Hasselblatt, Secretary, Dr. Torina Lewis, Associate Executive Director of Meetings and Professional Services, and Lucy Maddock, Chief Financial Officer and Associate Executive Director of Administration. Our 2021–2022 Congressional Fellow is Dr. AJ Stewart, who is working for Senator Warnock from Georgia. We also welcomed Dr. Tyler Kloefkorn, Associate Director of the Office of Government Relations and Dr. Justin Eilersten, who joined us as an Associate Editor at Mathematical Reviews, with a specialty in numerical analysis and statistics. With 200 employees, the AMS has not been immune to the increased employee turnover and the severe labor shortage you have been hearing about. If you would like to join our talented team in support of the global mathematics community, our open positions are listed here: <https://www.ams.org/ams-jobs> and those requiring a doctorate can also be found on [Mathjobs.org](https://www.mathjobs.org).

You may recall that part of implementation of our 2016–2020 Strategic Plan addressed communication. Effective communication remains an important priority for the AMS. We spent two years redesigning our AMS logo and propagating it throughout the organization. We made significant improvements to the printed and digital formats of the *Notices of the AMS*. We continue to progress through a multi-year project to upgrade [ams.org](https://www.ams.org). We upgraded our bi-weekly member newsletter, *Headlines & Deadlines*, as well as printed materials originating from Membership and Development. Did you know that you can log into

your member profile at <https://www.ams.org> to set your preferences (e.g., paper or print *Notices* and *Bulletin*) and to share your demographic data to help us understand our membership better?

We established our first Communications Department, which has been fully staffed for one year. In its first year, this department helped centralize our pandemic communications and conducted campaigns around AMS priorities such as promoting JMM Reimagined. This department wrote and distributed 18 long-form feature articles highlighting the positive impact of AMS programs on mathematicians; several of these articles were among our most highly viewed and shared digital content of the year. Although we continue to develop and implement more robust and sophisticated approaches to our communication strategy and messaging, we have struggled as an organization to navigate some delicate situations. Given that we are living in a world where reasonable discourse seems to be diminishing daily, identifying resources of patience and grace as we transverse this rocky terrain is essential to moving forward. I am pleased that Dr. Leona Harris, our new Director of Equity, Diversity, and Inclusion, has expressed as one of her priorities leveraging AMS communications to better inform our community and help bring the community together. Working together, I believe we can serve all mathematicians.

In closing, it is my absolute pleasure to serve this mathematics community in my role as Executive Director. It is deeply rewarding to work with exceptional employees and hundreds of dedicated volunteers. The pandemic has been rough on everyone, including me. The support we give each other is so important. Even when we disagree on the best approaches, it is clear that we share a common desire to advance mathematics in the most impactful ways possible. Thank you.



Dr. Catherine A. Roberts
Executive Director
May 2022