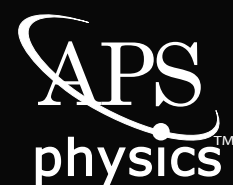
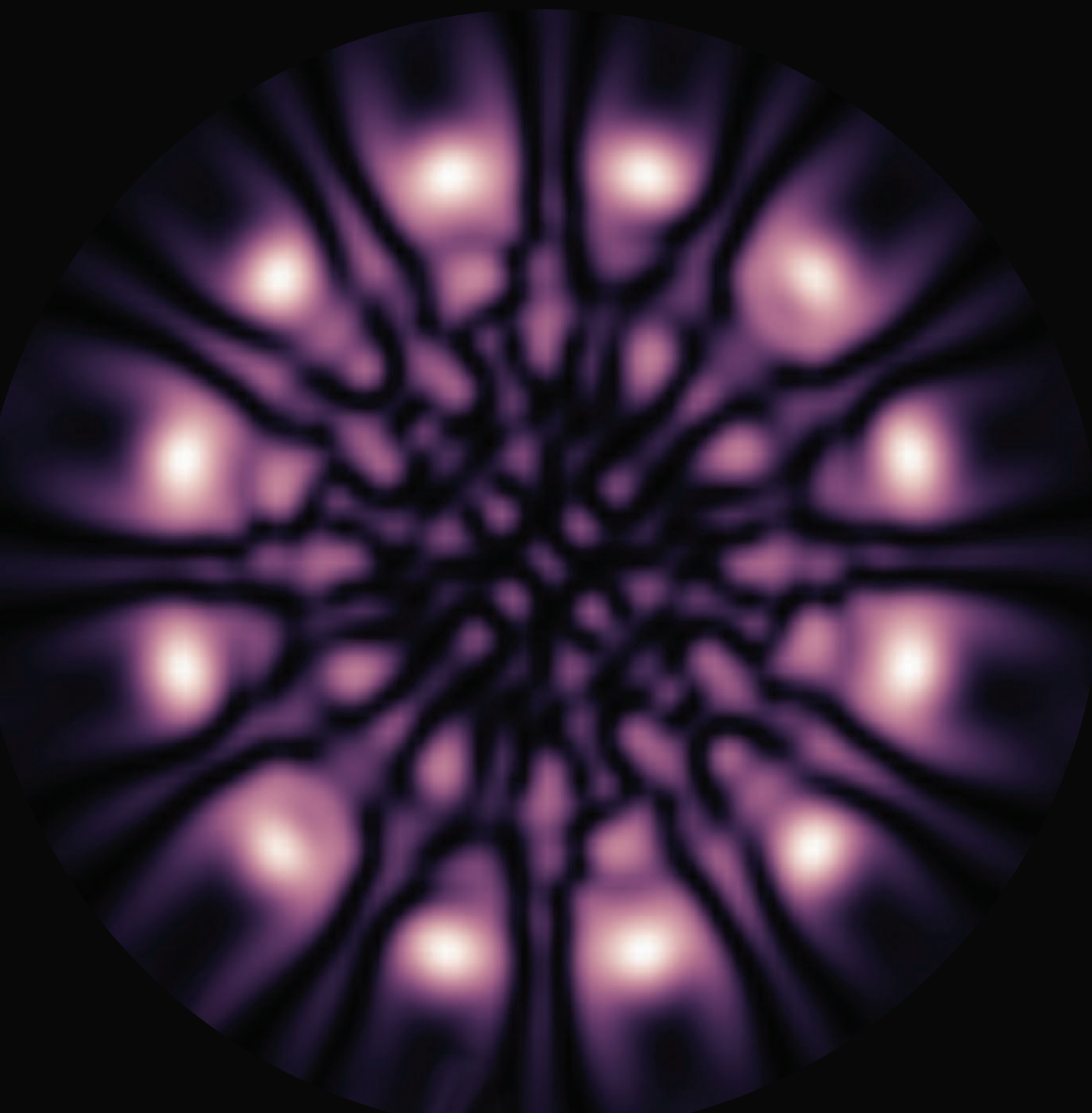


AMERICAN PHYSICAL SOCIETY

# STRATEGIC PLAN: 2019

FOR MEMBERS · FOR THE PHYSICS COMMUNITY · FOR SOCIETY



FOR MEMBERS · FOR THE PHYSICS COMMUNITY · FOR SOCIETY



Physicists seek to understand the governing principles of nature that determine the essence of matter, energy, space, and time.

# Addressing Today's Challenges Seizing Tomorrow's Opportunities

Wherever you are in your career or education, whatever your walk in life, if you are engaged in physics, if you have an interest in physics, if you have a passion for uncovering the deepest secrets of the universe, exploring the emergent phenomena of the quantum world, or applying the knowledge of physics to improving our daily lives, then APS IS HERE FOR YOU.

This plan builds on the *APS Strategic Plan: 2013-2017*. Following the change in the governance and staff leadership structure in 2014/15, it was important to develop a high-level, aspirational plan that encompasses the whole organization, encourages innovation and experimentation, and positions APS to best confront today's significant challenges, including:

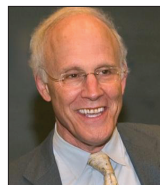
- Increasing the participation of the next generation of physicists and involving them in shaping APS to be the Society with which they will engage and support; See Page 7, Topic 2.
- Addressing the decline of public trust in science and public appreciation of the power of physics to transform our world; See Page 7, Topic 4.
- Advocating effectively for the conditions that support a robust scientific research enterprise, which enhances economic growth and trains people to address some of the urgent problems facing society; See Page 7, Topic 4.
- Responding to open access publishing mandates while continuing to publish high-quality, peer-reviewed journals that are sustainable and serve the needs of the worldwide physics community. See Page 8, Topics 1, 2, & 3.

Despite these challenges, the discipline of physics is strong and APS is strong; we are evolving from a position of strength, which affords us many opportunities.

As we look to the future we embrace inclusion and diversity, so that all who want to practice physics find a welcoming and supportive environment. Our engaged membership is our most important asset and we encourage all of you to involve yourselves in the work of APS. THIS IS YOUR SOCIETY.



Roger W. Falcone  
2018 APS President



David J. Gross  
2019 APS President



Kate P. Kirby  
APS CEO

## Our Mission

**To advance and diffuse the knowledge of physics for the benefit of humanity, promote physics, and serve the broader physics community, we**

Provide a welcoming and supportive professional home for an active, engaged, and diverse membership;

Advance scientific discovery and research dissemination;

Advocate for physics and physicists, and amplify the voice for science;

Share the excitement of physics and communicate the essential role physics plays in the modern world; and

Promote effective physics education for all.

## Our Vision

**To excel as a leading physics society, we will**

Be the authoritative advocate for physics;

Publish world-leading journals in physics and related sciences;

Convene vital meetings, conferences, and workshops;

Engage and support the next generation of physicists;

Foster equity and inclusion, and increase diversity in all its dimensions; and

Expand public appreciation of physics and its many contributions.

# Our Values

The core values that drive our mission are:

## **THE SCIENTIFIC METHOD**

We believe that the success and credibility of physics come from systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses leading to the development of theory.

## **TRUTH AND INTEGRITY**

The welfare of physics and the physics community requires that we act honestly, ethically, and with professional integrity in the conduct and reporting of physics.

## **DIVERSITY, INCLUSION, AND RESPECT**

Diversity in all its dimensions is an asset to physics and we are committed to full and respectful participation by everyone.

## **PARTNERING, COOPERATION, AND OPEN COLLABORATION**

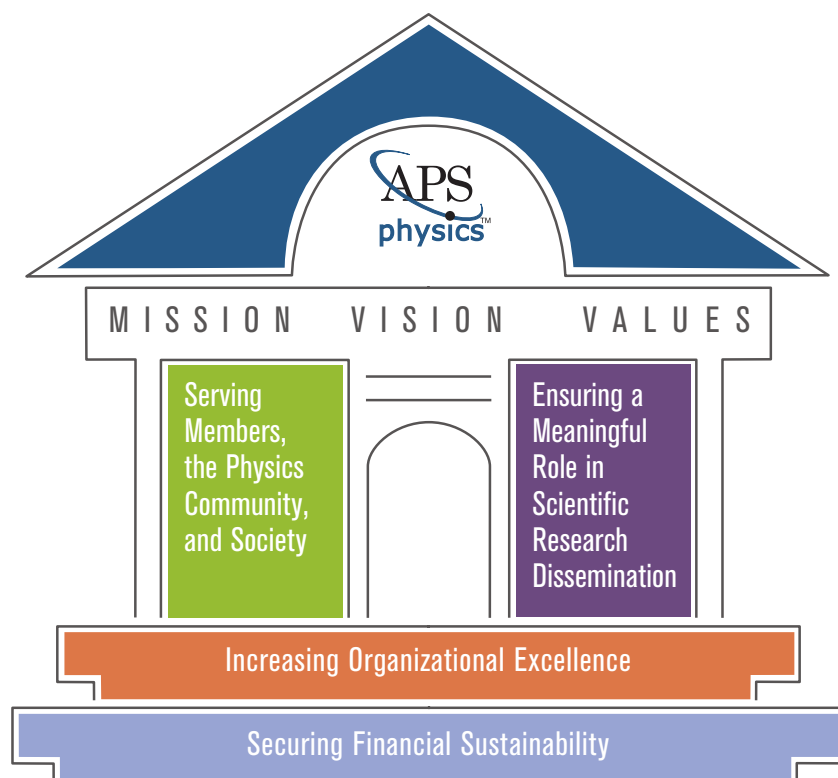
As physics benefits from being a global endeavor, we seek to create the conditions for free and open scientific exchange across national boundaries and political and ideological divides.

## **SPEAKING OUT**

Recognizing that good science benefits society, we speak out on issues where scientific evidence and expertise can inform the debate.

## **EDUCATION AND LEARNING**

The practice of physics involves lifelong learning and rigorous scholarship; we are committed to providing a community that values education at all levels and promotes open scientific discourse.



This *APS Strategic Plan: 2019* encompasses all of APS and rests on two essential pillars describing our mission:

**Serving Members, the Physics Community, and Society;** and  
**Ensuring a Meaningful Role in Scientific Research Dissemination.**

Strong foundations necessary for supporting these pillars are:

**Increasing Organizational Excellence;** and  
**Securing Financial Sustainability.**

These four elements, depicted in the 'gateway' graphic above, describe the overall structure of the plan.

# Serving Members, the Physics Community, and Society



**In order for physics and the physics community to benefit from the greatest talent, and to strengthen APS as an organization, we will provide a welcoming and inclusive environment for all those engaged in physics.**

Specific actions will include: EMBRACING DIVERSITY, INCLUSION, AND EQUITY at the highest levels of APS leadership; establishing best practices in the hiring and retention of staff, the population and education of committees, and the evaluation and selection of honorees.

**In order to attract and retain members and to fully serve the current and next generation of physicists, we will grow and broaden the APS membership to include more physicists in industry and the private sector, and provide additional tangible member benefits.**

Specific actions will include: RECRUITING MORE UNDERGRADUATE AND GRADUATE STUDENTS; PROVIDING MEMBERS WITH AN APS-CENTRIC MAGAZINE; forging new and closer ties with industry and the private sector; offering programs and workshops that address private-sector interest in emerging scientific topics; providing mentorship opportunities, career information, and leadership training for early-career scientists.

**In order to promote the advancement of physics globally and to better serve APS's international members, we will make connections and strengthen relationships throughout the international physics community.**

Specific actions will include: ESTABLISHING GEOGRAPHICALLY SPECIFIC INTERNATIONAL SECTIONS in response to member demand; advocating for greater scientific mobility and more advantageous visa policies; hosting a recurring summit of presidents of other national physics societies.

**In order to be the leading voice for physics in the U.S., we will support member engagement in effective science advocacy and public outreach, and in the shaping of science policy.**

Specific actions will include: INCREASING THE NUMBER OF APS-SUPPORTED CONGRESSIONAL SCIENCE FELLOWS; leading and partnering in coalitions with other societies and organizations; helping members become effective and informed advocates for science.

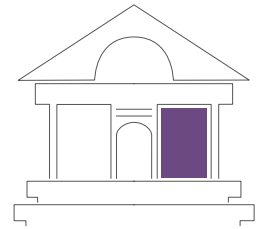
**In order for APS to continue to play a leadership role in innovative and impactful science education, outreach, and diversity programs, we will ensure that these programs align with and demonstrate the core values of APS, and that they are well-positioned to receive robust support and recognition.**

Specific actions will include: exploring better ways to communicate; defining and implementing leading educational models; offering opportunities for members to participate in public engagement; implementing periodic programmatic assessments.

**In order to further APS's mission, we will strategically invest in new, emerging opportunities to benefit members, the broader physics community, and society.**

Specific actions will include: SOLICITING PROPOSALS FROM MEMBERS AND STAFF FOR INNOVATIVE IDEAS for new programs and activities that APS will fund and help bring to fruition.

# Ensuring a Meaningful Role in Scientific Research Dissemination



**In order for the *Physical Review* journals to provide the preeminent venue for the curation and dissemination of physics and physics-related research internationally, we will be a leader in all aspects of journal publication.**

Specific actions will include: being a trusted and authoritative source of high-quality, peer-reviewed research and reporting; maximizing the availability of journal content; providing authors, referees, and readers with outstanding service, education, and support.

**In order to thrive in an evolving open access/open science environment, we will continue to inform the international dialogue and to develop our publishing portfolio and services to better address author and reader needs and respond to worldwide mandates.**

Specific actions will include: EXPLORING NEW AND SUSTAINABLE EDITORIAL, PUBLISHING, AND BUSINESS MODELS; experimenting with new services and products; advocating for funding and other resources that allow researchers to publish in an open access environment without further constraining their research activities.

**In order to be at the forefront of physics publishing and better serve the global scientific community, we will grow and diversify the APS publishing footprint to reflect the evolution of physics.**

Specific actions will include: STARTING JOURNALS IN NEW AND EMERGING FIELDS AND IN INTERDISCIPLINARY AREAS; expanding outreach to international authors.

**In order to convene must-attend physics-related meetings, from the big and global to the small and focused, we will improve APS meetings to better respond to the emerging needs of the various communities involved, especially students and early-career scientists, and to provide optimal experiences for all participants.**

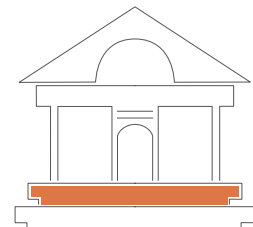
Specific actions will include: CREATING MORE SYNERGIES BETWEEN APS MEETINGS AND THE *PHYSICAL REVIEW* JOURNALS; embracing new technologies; exploring nontraditional ways of meeting.

**In order for members and others to appreciate the exciting discoveries in physics, notable developments in the physics community, and the many successful APS programs, we will explore new and better ways to communicate and interact more effectively.**

Specific actions will include: CREATING A NEW ANNUAL APS MEETING (in addition to the March and April Meetings); providing engaging, high-quality websites and social media channels.



## Increasing Organizational Excellence



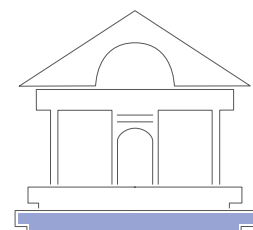
**In order to be a valued and respected organization, responsive to the needs of our members, and able to achieve our strategic initiatives, we will continually assess and improve internal organization and communication with members.**

Specific actions will include: REDUCING INTERNAL BARRIERS AND ENCOURAGING CROSS-ORGANIZATIONAL COLLABORATION; providing professional development information and opportunities for APS staff; implementing periodic organizational assessments.

**In order to assure member volunteers that their efforts, which are vital to the success of APS and its programs, are appreciated and worthwhile, we will improve the APS volunteer experience.**

Specific actions will include: PROVIDING INCREASED STAFF SUPPORT TO MEMBER VOLUNTEERS; enhancing the orientation and training of member volunteers.

## Securing Financial Sustainability



**In order for APS to continue to pursue its mission and fulfill its vision for the future, we will ensure that APS activities are sustainable and capable of thriving in perpetuity.**

Specific actions will include: implementing a strategic budgeting process, adopting appropriate investment and spending policies; optimizing APS's editorial, publishing, and business models, and use of physical assets.

**In order to mitigate future uncertainties relating to publishing, such as open access, we will seek to appropriately diversify APS's revenue sources.**

Specific actions will include: INCREASING PHILANTHROPIC EFFORTS in support of APS activities and programs; developing and monetizing products, services, and initiatives of value to the broader physics community.

### **STRATEGIC PLANNING STEERING COMMITTEE**

Nan Phinney, Chair, SLAC National Accelerator Laboratory  
Roger W. Falcone, University of California, Berkeley  
Tim Gay, University of Nebraska–Lincoln  
Julia Gonski, Harvard University  
David J. Gross, University of California, Santa Barbara  
Brad Marston, Brown University  
Kate P. Kirby, APS Chief Executive Officer  
James W. Taylor, APS Deputy Executive Officer and Chief Operating Officer  
Laurie Moret, Consultant

### **SERVING MEMBERS, THE PHYSICS COMMUNITY, AND SOCIETY SUBCOMMITTEE**

Francis Slakey, Chair, APS Chief Government Affairs Officer  
Michael Thoennessen, Co-Chair, APS Editor in Chief  
James M. Adams, National Institute of Standards and Technology  
Pushpa Bhat, Fermi National Accelerator Laboratory  
Gerald C. Blazey, Northern Illinois University  
Ray A. Mansbach, University of Illinois at Urbana-Champaign  
Amy S. Mullin, University of Maryland  
Paul Dlug, APS Director of IT, Journal Platform and Infrastructure  
Trish Lettieri, APS Director of Membership  
Monica Plisch, APS Director of Education and Diversity

### **ENSURING A MEANINGFUL ROLE IN SCIENTIFIC RESEARCH DISSEMINATION SUBCOMMITTEE**

Michael Thoennessen, Chair, APS Editor in Chief  
Matthew Salter, Co-Chair, APS Publisher  
Paul Ginsparg, Cornell University  
Barbara A. Jones, IBM Research - Almaden  
Andrea J. Liu, University of Pennsylvania  
Mitchell Walker, Georgia Institute of Technology  
John Wilkerson, University of North Carolina  
Chris Leighton, APS Lead Editor, *Physical Review Materials* and University of Minnesota  
Ling Miao, APS Managing Editor, *Physical Review X*  
Katherine Wright, APS Senior Editor, *Physics*

### **INCREASING ORGANIZATIONAL EXCELLENCE SUBCOMMITTEE**

Mark Doyle, Chair, APS Chief Information Officer  
Margaret Bandera, Co-Chair, APS Chief Financial Officer  
Patricia M. Dehmer, U.S. Department of Energy, Office of Science (Retired)  
Philip Johnson, American University  
Gregory P. Meisner, General Motors R&D (Retired)  
Robert Tribble, Brookhaven National Laboratory and Texas A&M University  
Darryl Campbell, APS Assistant Controller  
Sara Conners, APS Director of Communications  
Steven Lambert, APS Industrial Physics Fellow  
Terry Padula, APS Human Resources Manager

### **SECURING FINANCIAL SUSTAINABILITY SUBCOMMITTEE**

Margaret Bandera, Chair, APS Chief Financial Officer  
Matthew Salter, Co-Chair, APS Publisher  
James Hollenhorst, Agilent Technologies  
Cas Milner, Los Alamos National Laboratory (Retired)  
John Rumble, Jr., R&R Data Services  
Theodore Hodapp, APS Director of Project Development and Senior Advisor to Education and Diversity  
Daniel T. Kulp, APS Editorial Director  
Irene I. Lukoff, APS Director of Development  
Matt Wascavage, APS Director of Sales Operations

## ABOUT APS

The American Physical Society (APS) is a nonprofit membership organization working to advance and diffuse the knowledge of physics through its outstanding research journals, scientific meetings, and education, outreach, advocacy, and international activities. APS represents over 55,000 members, including scientists and professionals in physics-related disciplines in academia, national laboratories, government, and industry in the United States and throughout the world. Society offices are located in College Park, MD (Headquarters), Ridge, NY (Editorial), and Washington, D.C. (Government Affairs).

## PROCESS

The APS Board of Directors appointed a Steering Committee (listed on page 10) to guide the strategic planning process. The Steering Committee was advised throughout by a consultant, Dr. Laurie Moret. Input was solicited from APS staff in January 2018, unit leaders at the Leadership Convocation in February 2018, and the APS Council of Representatives in April 2018. Town Hall meetings and Focus Groups were held at both the 2018 March Meeting and 2018 April Meeting. Four subcommittees were formed (see page 10) in order to solicit additional input in the areas of focus. The subcommittees met, developed, and prioritized strategies, and reported their findings to the Steering Committee in August 2018. The Steering Committee wrote an initial draft of the plan and presented it to the Board in September 2018, and a revised draft was presented to the Council in October 2018. The final plan was reviewed and approved by the Council and Board, respectively, in November 2018.

[go.aps.org/strategicplan](http://go.aps.org/strategicplan)

## AUTHORSHIP

The American Physical Society has sole responsibility for the contents of this document.

## PUBLICATION DATE: JANUARY 2019

This document is available under the terms of a Creative Commons Attribution 4.0 International License. Sharing and adapting the material for any purpose, even commercial, does not require prior written permission. Further distribution of this work must provide appropriate credit, provide a link to the license, and indicate if changes were made. For more information, please visit the Creative Commons website.



