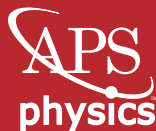


AMERICAN PHYSICAL SOCIETY  
2009 ANNUAL REPORT



The American Physical Society strives to:

Be the leading voice for physics and an authoritative source of physics information for the advancement of physics and the benefit of humanity;

Collaborate with national scientific societies for the advancement of science, science education, and the science community;

Cooperate with international physics societies to promote physics, to support physicists worldwide, and to foster international collaboration;

Have an active, engaged, and diverse membership, and support the activities of its units and members.

COVER PHOTO: The expected event rate for finding axions from the sun converting into photons in a germanium detector, vs. time (horizontal axis, 0–1 day) and energy (vertical axis, 2–8 keV). Calculated by the Cryogenic Dark Matter Search (CDMS) collaboration (Z. Ahmed et al., *Phys. Rev. Lett.* 103, 141802 (2009)). PAGE 2: A crown formed by the splash of a 2-mm drop of red dye hitting a thin layer of milk (Wim van Hoeve, Univ. of Twente). PAGE 3: Electron micrograph of a “rose” less than a millimeter across, built with polymers, using nanoscale construction techniques (Sungwon Ma, Georgia Inst. of Tech.). PAGE 4: Axial electric field strength computed for a particle accelerator cavity that is a 2-dimensional photonic crystal. Black circles indicate the positions of dielectric rods (G. R. Werner et al., *Phys. Rev. ST Accel. Beams* 12 071301 (2009)). PAGE 5: Far-field intensity of an Airy beam in water, as a function of wavelength (horizontal axis) and angular position (vertical axis) (P. Polynkin et al., *Phys. Rev. Lett.* 103, 123902 (2009)). PAGE 6: The house-sized STAR detector at the Relativistic Heavy Ion Collider tracks thousands of particles produced by each ion collision (Brookhaven National Lab). PAGE 7: Simulation of a laser driven plasma wave (blue/green = electron rich, red/orange = ion rich) that moves rightward at the speed of light and emits an electromagnetic shock (D. F. Gordon et al., *Phys. Rev. Lett.* 101, 045004 (2008)). PAGE 8: Simulation of the response of a system of five coupled waveguides to light injected into the central one, with possible applications in quantum computing (A. Rai et al., *Phys. Rev. A* 78, 042304 (2008)). PAGE 9: Image of the 2-light-year-wide Butterfly Nebula (NGC 6302)—an unusually-shaped planetary nebula—taken by the Wide Field Camera 3 aboard the Hubble Space Telescope in July 2009 (NASA, ESA, and the Hubble SM4 ERO Team). PAGE 10: Number of electrons emitted by copper-based superconductors when exposed to ultraviolet light (A. Millis, Columbia Univ., M. Norman, Argonne National Lab).



## FROM THE PRESIDENT

---

**THE YEAR OF MY AMERICAN PHYSICAL SOCIETY PRESIDENCY, 2009**, was an exciting year for APS, the country and the world. Barack Obama took office as U.S. President in January with an education and science agenda and quickly appointed physicists to cabinet-level posts.

To address the nationwide economic crisis, the ARRA “Stimulus” bill was passed, including significant levels of funding for science. The APS Washington Office, together with other organizations, was instrumental in making this happen, thus avoiding many layoffs in the DOE national laboratories and increasing science funding at a number of universities. The FY2010 budget for much of science was increased, in accordance with Obama’s pledge to double the NSF and DOE Office of Science budgets.

Climate Change became a big issue for APS when at the May Council meeting a members’ petition was brought forward to replace the 2007 APS statement on Climate Change with a different statement. As a result, I appointed a blue ribbon panel chaired by Daniel Kleppner to advise the APS presidential line and Council on this issue. At the November Council meeting the motion to adopt the substitute statement was overwhelmingly defeated, but in accord with the Kleppner committee recommendation, the APS Panel on Public Affairs was charged with reviewing the 2007 statement for “clarity and tone.”

Although the APS financial reserves were affected by the stock market plunge, APS managed to avoid layoffs due to prudent spending practices. APS journals continue to publish outstanding physics research extremely cost-effectively, and despite the global financial downturn, subscriptions did not decrease. The online journal *Physics* celebrated its very successful first year in September, 2009.

Throughout the year I have had the opportunity to promote a number of issues which I think are important for physics and for APS, and some of these are described in more detail elsewhere in this Report: developing a program to increase the number of underrepresented minority PhDs in physics; exploring how APS can better serve and engage its international members, drafting an initial policy on Open Access, and working with the Executive Board and APS staff to set down some Guiding Principles reinforcing the mutual support and interdependence of the publishing, membership and business sides of the Society.

At the end of July, after 15 years of outstanding service to APS, Judy Franz retired as Executive Officer. I was very pleased to announce the appointment of the new Executive Officer, Kate Kirby, an atomic and molecular physicist, formerly at Harvard-Smithsonian Center for Astrophysics.

APS continues to be a strong and dynamic force for physics and the physics community, powered by outstanding volunteers and staff, working together.

Cherry Murray  
APS 2009 President



## THE LEADERSHIP OF THE SOCIETY HAS SET FORTH THESE GUIDING

**PRINCIPLES FOR OUR PUBLICATIONS:** The journals are committed to serve the global scientific community; to base editorial decisions solely on scientific merit; and to support the principles of Open Access to the greatest extent possible consistent with the maintenance of high quality refereeing, editing, and financial stability of the APS.

## RESEARCH PUBLICATIONS

Realizing that *Physical Review Letters* had gradually departed from its original mission, editors and leadership of APS decided in 2009 to reinvigorate and reassert the standards of the journal. Authors are now asked to submit only those papers that clearly meet the criteria of importance and breadth of interest, and referees must affirm that a Letter meets these standards. Along with greater selectivity, the reinvigoration of standards will increase efficiency, result in speedier decisions, and clearly identify PRL as the venue for accounts of the most crucial physics research.

*Physics*, the free online publication that highlights articles from the APS journals, celebrated its first birthday in September and by the end of 2009 had attracted over 22,000 subscribers to RSS feeds or email alerts. New material is added to *Physics* weekly, in the form of “Viewpoints,” which place a single important paper in context, and “Synopsis,” which are staff-written distillations of particularly significant papers. “Trends,” in which an expert examines current research in a hot field, are added monthly. We are exploring several options for expanding upon the success of *Physics*.

Following long and careful consideration, leadership and staff of APS decided to begin hosting all of the APS journal content on a single platform run by the APS Editorial Office. Preparations were made in the second half of 2009 so that the switchover

could take place at year’s end. One component of the project was the introduction of individual journal accounts, which will give readers, authors, referees, and members a more personalized, unified view of all APS journal services. Additionally, the Editorial Office and APS Membership Department are working together to allow members to access membership services through these new accounts. The new platform will allow faster introduction of new features across all APS journal web sites.

A related measure taken prior to the switchover was the establishment of a relationship with the Copyright Clearance Center and their Rightslink system. This is a web-based system for authors and other users of the journals to facilitate the ordering of and payment for color figures, reprints, Free to Read, and other special services that may be offered over time.

This year APS entered into an agreement with Harvard University that eliminates the obligation on the part of the university’s authors to acquire waivers of Harvard’s prior license when they submit to the APS journals. A similar agreement was signed with MIT in December. Other institutions and their authors may find these agreements to be useful models in their interactions with APS and other scholarly publishers. Adjustments to copyright policies in order to accommodate the changing needs of authors and their institutions are

also being considered, such as a fee-based Creative Commons license.

In 2009, reviews of *Physical Review C* and of *Reviews of Modern Physics* were conducted by volunteer committees charged by the APS Editor in Chief. These committees look at how well a given journal is serving its community, the quality of refereeing, and whether staffing levels are appropriate, and they are often asked to make a recommendation regarding the reappointment of the journal editor.

As submissions to the journals continue to increase in number and editors become more involved in outreach and highlighting activities, office space is once again at a premium and meeting space is in particularly high demand. With enhanced electronic efficiencies, the various departments that support the peer review process have managed the increased volume without an increase in personnel, but editorial staff must grow to handle the additional submissions. A volunteer task force and staff group examined options for obtaining more space, and the most cost effective choice turned out to be a second floor addition to the Editorial Office. During 2009, the Vice President, Treasurer and Editor in Chief worked with a planning firm and architects to look at costs and advantages that can be gained in a building expansion. The formal proposal will be submitted to Council for a vote in April of 2010.



**THE ANNUAL MARCH AND APRIL MEETINGS IN 2009** were again very successful. The March Meeting, held in Pittsburgh, was one of the largest in our history, with more than 7,500 registered attendees. The April Meeting, held in Denver, attracted more than 1,200 attendees.



## SCIENTIFIC MEETINGS

The March Meeting program included more than 6,900 papers, presented in invited, contributed, and poster sessions. Over 3,000 students and 1,565 international members attended. All of these numbers have increased considerably in recent years. More than 800 new APS members were gained during the March Meeting registration process.

Several pre-meeting programs were held at the March Meeting including a Division of Polymer Physics short course, tutorials and three workshops; one on opportunities in biology for physicists, one on professional skills development for women physicists, and one on opportunities in energy research. Several special sessions were held during the meeting, including evening sessions entitled, Energy and the Environment, Funding Opportunities at NSF, Funding Opportunities at DOE, and Windows on Our Universe: Breakthroughs in Observational Cosmology.

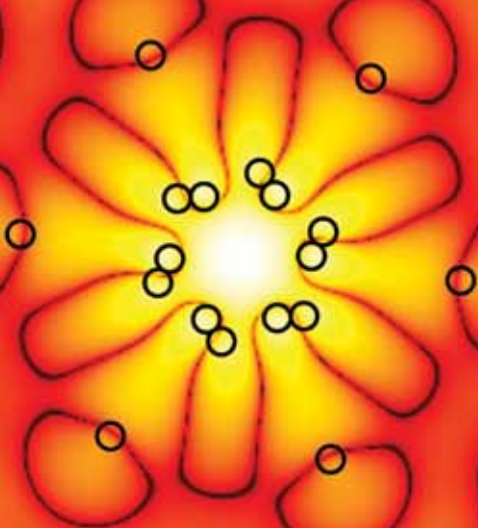
The April Meeting was joined by the Sherwood Fusion Theory Conference. The theme of the meeting was “New Eyes on

the Universe: 400 Years of Telescopes.”

The April program consisted of approximately 200 invited talks and 700 contributed talks.

The plenary talks, added to the program several years ago, continue to be very well attended. In addition, two special sessions were held including a Town Hall Meeting on DOE/NASA Joint Dark Energy Mission (JDEM), a keynote talk on The Quest for Giant Telescopes: Four Centuries of Challenge and Scientific Discovery, as well as a Town Hall Meeting on the Astronomy & Astrophysics Decadal Survey, and a public lecture entitled Death From the Skies by Dr. Philip Plait. More than 70 new members were gained during the April Meeting registration process.

Throughout 2009 there were many other scientific meetings sponsored by APS units, including meetings of the Divisions of Nuclear Physics (DNP), Atomic, Molecular and Optical Physics (DAMOP), Fluid Dynamics (DFD), Plasma Physics (DPP), as well as several meetings sponsored by topical groups and sections.



**THE YEAR 2009 MARKED THE 15TH ANNIVERSARY OF APS'S ENTRANCE INTO THE ADVOCACY ARENA,** and it probably ranked as the Society's most successful one. Immediately after the November 2008 election, advisors to the Obama Transition Team requested APS's help in formulating science recommendations for the American Recovery and Reinvestment Act.

## PUBLIC AFFAIRS

The APS Public Affairs Office, working closely with several notable scientists and policy makers, generated a detailed \$10 billion plan for U.S. physical sciences, math and engineering that emphasized science infrastructure and instrumentation. In late January, Obama Administration officials and the leadership of the House of Representatives embraced the APS proposal, and several weeks afterward, a House-Senate conference committee adopted the major features of the plan.

During the month that followed, APS worked with the Task Force on American Innovation (TFAI) and other advocacy groups to help secure record-setting increases for science research and education in the FY 2009 appropriations bills, which had been delayed by partisan wrangling over bottom-line spending prior to the November election. Throughout the calendar year, APS supported TFAI, the Association of American Universities, the Association of Public and Land-Grant Universities and a number of agency-specific advocacy coalitions in successfully pressing the case for strong science funding in the FY 2010 appropriations bills that were enacted into law before Congress adjourned in December.

APS saw another success when the White House and Congress adopted many key recommendations of the Society's signature 2008 report, *Energy Future: Think Efficiency*. The Recovery Act and the FY 2010 Energy and Water appropriations bill included major funding for battery research and integrated building design. And as the report had suggested, administration officials agreed that a stronger commitment to social science research in the energy arena was needed.

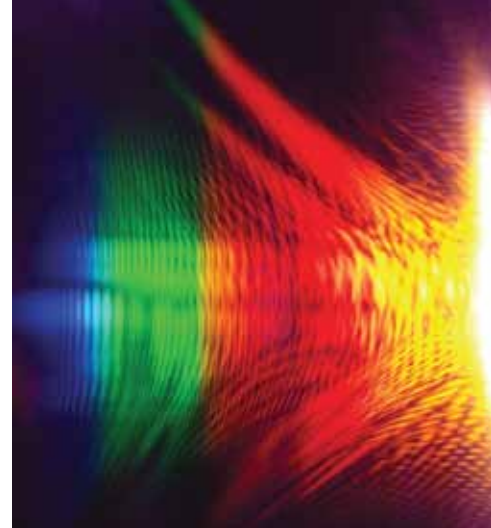
U.S. Secretary of Energy Steven Chu provided additional focus on energy efficiency during his confirmation hearing, in which he dwelt at length on the importance of energy security and carbon reductions. APS helped to encourage media attention to Chu, an APS Fellow and the first Nobelist to serve as a Cabinet officer. APS also successfully engaged the media in its coverage of the science portion of the Recovery Act, with *The New York Times*, *Science*, *Nature* and *The Hill* among many publications publishing stories about how Recovery Act funding not only would help American science, but would also provide jobs for middle-class blue-collar workers. In June, when the Task Force on American Innovation named

House Speaker Nancy Pelosi "Legislator of the Year" for her advocacy on behalf of science, APS helped garner significant press coverage for the event.

Earlier in the year, on a very different media note, APS successfully contended with unfavorable publicity it received in a story on CBS's "60 Minutes." The April 19 segment had given the false impression that APS endorsed the concept of "cold fusion." In response to pressure from APS, CBS retracted that portion of the story and issued a written statement of apology on its web site.

Through the Panel on Public Affairs, APS also initiated four technical studies to tackle issues that are high on the agenda of policymakers. The POPA study groups are addressing (1) steps to support nuclear arsenal downsizing, (2) ways to increasing the load of renewable energy on the electrical grid, (3) the availability of critical elements in new energy technologies and (4) the direct capture of carbon dioxide from the atmosphere. The study groups expect to release their reports throughout 2010.

In order to engage the APS membership on issues involving science and public policy, the APS Washington Office initiated the blog, "Physics Frontline" in October, 2009.



**IN 2009, APS RECEIVED A \$6.5 MILLION AWARD** from the National Science Foundation (NSF) to support PhysTEC, our flagship education program since 2001. This award, the largest APS has ever received, funds a collaborative effort between APS and the American Association of Physics Teachers, to improve and promote the education of future physics and physical science teachers.

## EDUCATION

The PhysTEC project has two main efforts: PhysTEC institutions and the national Physics Teacher Education Coalition (PTEC). PhysTEC institutions (see [PhysTEC.org](http://PhysTEC.org) for more information) are selected colleges and universities that receive substantial support to develop their physics teacher preparation programs into national models, by employing local master teachers, increasing teacher recruiting efforts, developing early teaching experiences, improving content and pedagogy courses, and fostering collaboration among physics departments, education schools, and local school districts.

The project currently supports four sites: Cornell University, Florida International University, the University of Minnesota, and the University of North Carolina at Chapel Hill. Eight previously supported sites have sustained significant project activities beyond the end of their funding periods. In addition, the project recently solicited

a new round of proposals, and plans to support six additional institutions starting in 2010, and add six more in each of the following two or more years. A related project, the NSF-funded PhysTEC Noyce Scholarship program provided nine scholarships of \$15K each to future physics teachers at PhysTEC institutions and will provide about 40 more over the next three years.

PTEC ([PTEC.org](http://PTEC.org)) has grown to include over 175 institutions committed to improving physics teacher education. The 2009 PTEC Conference was held in Pittsburgh in conjunction with the APS March meeting, and attracted over 100 participants committed to improving their physics teacher education programs. Workshops and panel discussions focused on topics such as developing teacher pedagogical content knowledge, facilitating institutional change, and generating funding for teacher preparation efforts. The project also held a one-day pre-conference workshop for members of the Association for

Public and Land-grant Universities' Science and Math Teacher Imperative.

PhysTEC also sponsors a joint APS-AAPT-American Institute of Physics (AIP) Task Force on Teacher Education in Physics that collected data on physics teacher preparation nationally and conducted site visits to a dozen exemplary programs. Its report will come out in early 2010 and will be sent to every physics department in the country. Project leaders at each society also collaborated on a feature article that appeared in the February 2009 edition of *Physics Today*.

Working with AAPT and the American Astronomical Society, APS continued to offer New Faculty Workshops that help faculty members early in their teaching careers learn about their role as educators and manage their numerous responsibilities. Beyond education and time-management skills, the workshops also provide information about grant applications and funding opportunities.



## THROUGHOUT 2009, APS SERVED PHYSICISTS INTERNATIONALLY

through a variety of services and programs including graduate student exchanges, economic development workshops and international travel awards.

## INTERNATIONAL AFFAIRS

We partnered with physics societies of other nations in support of a number of workshops and conferences. With the Canadian Association of Physicists (CAP) and the Sociedad Mexicana de Fisica (SMF), APS co-sponsored the 2009 Canada-America-Mexico Physics Graduate Student Conference (CAM2009). Leaders of the APS Forum on Graduate Student Affairs worked with their international counterparts to provide a unique conference for physics graduate students, organized by the students themselves, with mentorship from senior staff of the professional societies. The CAM2009 Conference, held in Acapulco, Mexico, broadened students' view of physics beyond their own classrooms and laboratories, promoted cooperation among international counterparts, and fostered an appreciation of the different experiences of physics students from North American countries. By promoting international scientific exchanges and networking among young physics researchers, CAM2009 will have a long-term impact on graduate student attendees.

APS also partnered with the UK Institute of Physics (IoP) and the South African Institute of Physics (SAIP) in organizing a workshop held in Cape Town, "Entrepreneurship for Physicists and Engineers from Developing Countries." The workshop introduced African scientists and engineers to the process of innovation, generation

and protection of intellectual property, technology transfer and commercialization, topics which are not discussed in many of the universities and scientific organizations in developing countries.

APS also expanded its ongoing programs to support colleagues throughout the developing world. Our units increased their participation in the International Travel Grant Award Program (ITGAP), which enables collaborative research between APS members and developing country physicists. A new "start-up" initiative, the "Training-Travel Program for Developing Country Physicists" provided grants of up to \$2K each to cover travel expenses for young physicists from developing countries, including graduate students and postdocs, to participate in training workshops/schools in the United States. The Society is seeking external funds to sustain the program long-term.

APS continues to partner with the Indo-US Science and Technology Forum (IUSSTF) toward exchanges of graduate students and professors between the United States and India. This ongoing program funds physicists' visits overseas to teach short courses or provide a "physics lecture series" at U.S. and Indian universities. The student visitation program not only enables U.S. students to conduct research in India's laboratories, but provides first-hand experience with Indian science and culture, and

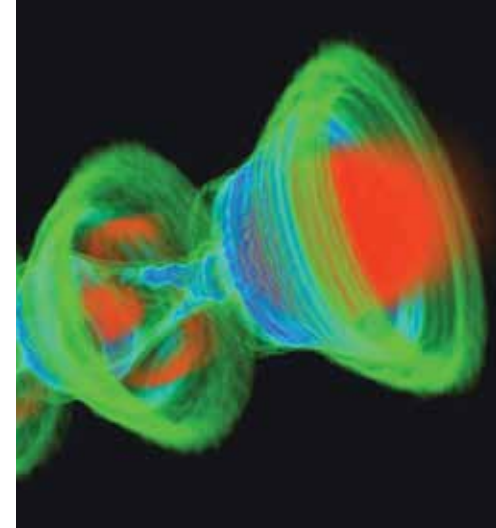
fosters opportunities for developing long-term collaborations.

This year we brought international physicists to speak at APS meetings through the Beller and Marshak Lectureship Awards, which support distinguished physicists from both developed and developing countries, respectively. The Marshak Awardee came from Egypt, and the Beller Awards were presented to physicists from Israel, the United Kingdom and France.

APS also supported the SESAME project—the synchrotron light source in Amman, Jordan that brings together physicists from Arab countries and Israel for international scientific collaboration. In light of President Obama's focus this past year on "science for diplomacy" in the Middle East, APS met with US government leaders to strengthen US support for SESAME. The German Physical Society joined APS's SESAME Travel Award Program, expanding the partnership with the UK Institute of Physics and the European Physical Society (EPS) to enable Middle East physicists to attend SESAME "Users Meetings" and other training opportunities.

As the past year saw ever-increasing visa delays, APS joined a group of 30 leading academic, science and engineering associations in signing a jointly developed statement and recommendations to improve visa processing for scientists.





## THIS YEAR WE BOLSTERED OUR OUTREACH PROGRAMS THAT MAKE PHYSICS ACCESSIBLE AND EXCITING to people of all ages.

We updated PhysicsQuest, our program to bring fun physics topics to middle school classrooms, and PhysicsCentral, our innovative outreach website. Through our media relations work, we increased coverage of physics research in the popular media. Science journalists turn to us to keep informed about the latest physics research.

## INFORMING THE PUBLIC

PhysicsQuest, a kit-based program for middle school students that reaches over 13,000 classrooms each year, now includes a comic featuring the laser super hero, Spectra, and her battles with the evil Miss Alignment. The comic was so successful that this year we printed and distributed over 5,000 books. The comic book and the PhysicsQuest program will be part of next year's LaserFest, the 50th anniversary of the laser.

APS is one of the founding partners of LaserFest, in conjunction with the Optical Society, SPIE, and IEEE Photonics. We maintain the LaserFest website ([www.laserfest.org](http://www.laserfest.org)), administer LaserFest on the Road mini-grants to outreach teams nationwide, and participate in meetings and conferences around the country.

Our website PhysicsCentral now features the popular PhysicsBuzz blog, which gets about 2,000 hits a week with certain articles getting upwards of 20,000 hits. PhysicsCentral is updated regularly with stories about current research, profiles of people in physics, physics pictures and at-home experiments. A redesign aimed at

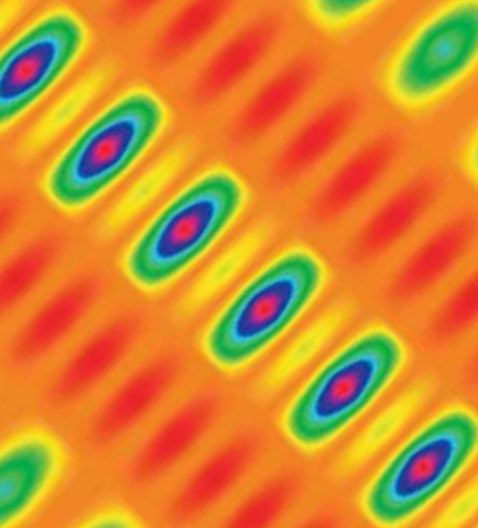
improving the look and feel of the site is underway and will be launched early in 2010.

In April 2009, Six Flags America held a Physics Day for local area students and APS partnered with the Society of Physics Students (SPS) and the American Association of Physics Teachers to run physics programs throughout the day. We provided students with accelerometers and brought more than 20 SPS members to the park to perform physics demos. We created an outreach guide to help APS members interested in starting or expanding their own outreach efforts. In the summer of 2009, APS partnered with the American Chemical Society and the American Geological Institute to create two week-long workshops to teach the connections between the different sciences. Over 60 teachers participated.

The APS Media Relations office fields inquiries and assists APS members and staff with informing the media. We alert journalists to important physics news and policies. We disseminate physics news using email alerts, embargoed press releases distributed through distribution services such as

Eurekalert, the APS Physics News Ticker blog (a password-protected compilation of summaries of hundreds of APS journal papers), and press releases announcing APS news originating from sources other than the Society's journals (Society statements, meeting news, etc.).

The bulk of APS media relations activities involves traditional news outlets such as newspapers, magazines, radio programs and television. However, more and more of our activities focus on reaching out to informal media outlets such as blogs, online-only news services and web pages. This year, our media Relations office worked with the American Institute of Physics to produce articles for the AIP wire service Inside Science News Service (ISNS). The wire service helps fill the void in science reporting that is developing as more news outlets scale back their science journalism staffing. In combination with traditional media relations efforts, participation in ISNS allows APS to ensure that high quality physics coverage continues to appear in a wide range of news outlets.



**ACHIEVING RACIAL AND GENDER DIVERSITY IN PHYSICS IS A TOP PRIORITY.** APS granted scholarships to 30 undergraduate physics students.

We received a National Science Foundation grant for our Minority Bridge Program ([aps.org/mbp](http://aps.org/mbp)) to increase the number of underrepresented minorities receiving physics PhDs. Our Committee on the Status of Women in Physics continued to support women physicists through workshops and university site visits.

## DIVERSITY

---

Thanks to private donations, APS continues its very successful Minority Scholarship Program for undergraduate physics majors. Students are mentored by the Committee on Minorities in Physics, APS staff, and faculty at their institutions. This year, a Facebook Group for past and present minority scholarship recipients was established to disseminate pertinent information and to allow scholars to communicate with one another.

Our Minority Bridge Program is gathering information to establish programs with doctoral-granting institutions that will enable capable undergraduates who might otherwise not enter or complete a graduate education to do so. The program steering committee, chaired by APS President Cherry Murray, worked to develop the infrastructure for this program, and has met with students, existing bridge program directors from across the country, and leaders at research institutions. The program manager visited several minority-serving institutions to talk with students, faculty, and administrators, spreading the good

news about this project and identifying participating institutions.

The Committee on the Status of Women in Physics (CSWP) held two NSF-funded workshops for post-doctoral associates and women faculty in 2009 at the March and April meetings. A total of 57 women physicists participated, working in small groups with professional facilitators to improve their communication and negotiation skills.

Building on the success of a 2007 workshop, “Gender Equity: Strengthening the Physics Enterprise in Universities and National Laboratories,” CSWP began offering a new type of site visit to physics departments: “Conversations on Gender Equity.” These visits spark discussions about issues that impact women (like childcare) and help departments formulate action plans for improving gender equity. APS also awarded three Blewett Scholarships to women physicists in the early stages of their career. These unique scholarships enable women physicists who have had to interrupt their careers for family reasons to resume their physics research.

**APS CONTINUED TO GROW**, even as the US economy slowed, and even as other scientific societies have seen their membership numbers and meeting attendance decline. Our official member count for 2009 is 47,947. It is up by over 700 from last year and is again a new record.



## MEMBERSHIP

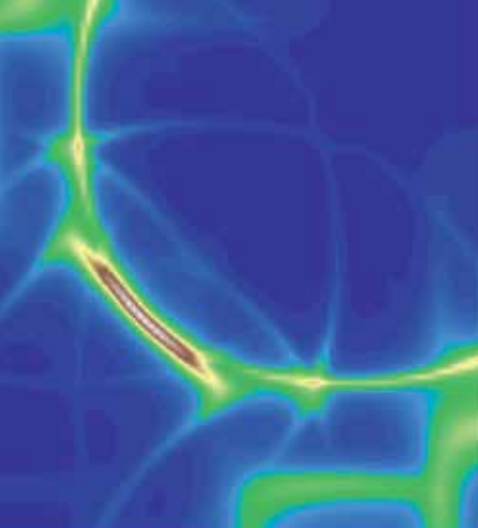
Most of the growth came in the Student member category for the fourth straight year. Student members continue to become more involved in Society activities, adding a bright outlook for the stability of the APS membership. There also continues to be a significant international component with approximately 10,000 members, or 21%, from outside the US.

APS units continued to thrive, with most increasing their memberships this past year. Initiated in 2009, a new unit, the Topical Group on Energy Research and Applications (GERA), plans to focus on fostering the education of the next generations of researchers and educators and facilitating networking of scientists and engineers active in this area.

A membership survey sent to all graduate student members, approximately 9,000, was completed this year. The intent of the survey was to evaluate students' perceptions of APS programs, what APS does

well for this membership group and what can be done better to transition students to the Junior member category and beyond. The Committee on Membership formed a task force, made up of Junior members, to help develop the survey, review the final report in 2010, and make any appropriate recommendations for changes or additional services to the Committee.

The "Friends of APS" program, started in 2000, currently has 160 participants. "Friends" are APS members who have agreed to help facilitate communication with current and potential members at their own institutions. Throughout the year, information is sent to them regarding membership, programs, and benefits. This can be shared with colleagues and students. The "Friends" program is a useful tool in both retaining and attracting APS members. In 2010 APS will be expanding its "Friends" program internationally as well.



**IN 2009, APS BESTOWED 47 PRIZES AND AWARDS** on a total of 63 individuals, covering a broad range of physics research as well as contributions by physicists both to the physics community and to society. Eighteen prizes were presented at the March Meeting, 16 at the April Meeting, and 13 at various divisional meetings throughout the year.

## PRIZES, AWARDS, FELLOWSHIPS

---

This year the March meeting saw the first presentation of the new Prize for Industrial Applications of Physics, to Philip J. Wyatt of Wyatt Technology Corporation. The Prize will be awarded every other year.

In 2009, for the first time the prize and award selection process was completely electronic, with nominations submitted online and stored in a database for review by the appropriate selection committees.

APS elected 219 Fellows in 2009. Election to Fellowship represents recognition by one's professional peers, and is highly competitive. The number of Fellows is restricted to 0.5% of APS' membership in any given year.

**WE INCREASED OUR CAREER SEARCH SUPPORT TO PHYSICISTS WORLDWIDE.** Twice as many new resumes were posted on our online career center ([careers.aps.org](http://careers.aps.org)) and we had a 24% increase in jobs posted.

## CAREERS

---

Our Committee on Careers and Professional Development improved the content and organization of the careers website ([aps.org/careers](http://aps.org/careers)), a major career resource for physicists. APS developed substantial content for a new Physics Career Resource website, aimed at undergraduate students and is part of an NSF-funded joint-Society digital library, ComPADRE ([compadre.org](http://compadre.org)). In our efforts to bring more students into the physics profession,

APS contracted with a marketing professional to develop a replicable marketing campaign that can be used by universities or high schools. One component of this campaign is a poster developed with AAPT for classrooms that gives the "Top 10" reasons to study physics. In 2009 we launched a PowerPoint slide show, InSight ([aps.org/careers/insight](http://aps.org/careers/insight)), aimed at helping institutions recruit students to study physics. The slide show, updated bimonthly, is now

regularly downloaded by a growing number of departments.

APS continues to sponsor career fairs and workshops at our national meetings to help members improve their resume and job interview skills. The April 2009 meeting featured a panel of physicists from national labs, industry, and universities who shared their thoughts about applying for jobs in each sector, marketing one's skills, and networking.



**DURING THE FISCAL YEAR 2009, THE TOTAL ASSETS OF THE AMERICAN PHYSICAL SOCIETY INCREASED** from \$105.6M to \$127.1M, while the Society's liabilities increased to \$33.9M from \$29.0M the previous year.

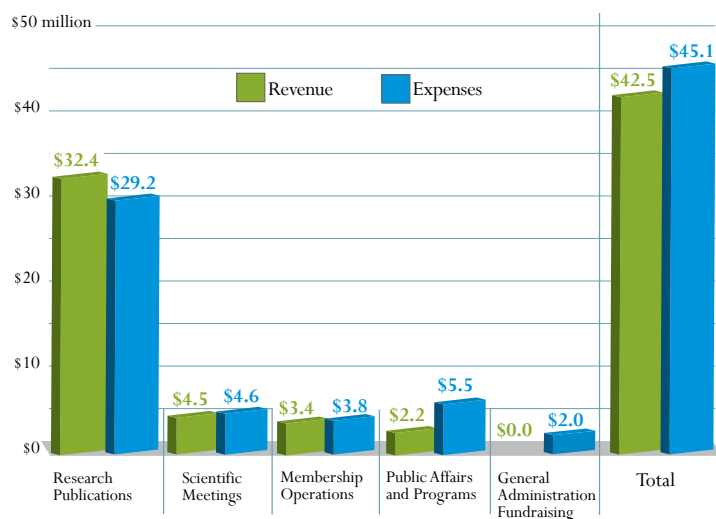
The tables and charts in this section summarize the financial operations of the Society as of December 31, 2009. The table headed *Statement of Financial Position* shows the final financial position of the Society for 2008 and 2009. The table headed *Statement of Activities* shows the financial activities of the various components of the Society for the 2008 and 2009 fiscal years. The distribution of operating revenues and expenses across the components of the Society is also displayed graphically in the accompanying figures.

Net assets at the end of fiscal year 2009 were \$93.1M, compared with \$76.7M at the end of 2008. These net assets include \$11.4M in restricted net assets, which are funds for prizes and awards and for the programs of the current capital campaign, and which increased slightly from \$11.2M at the end of 2008.

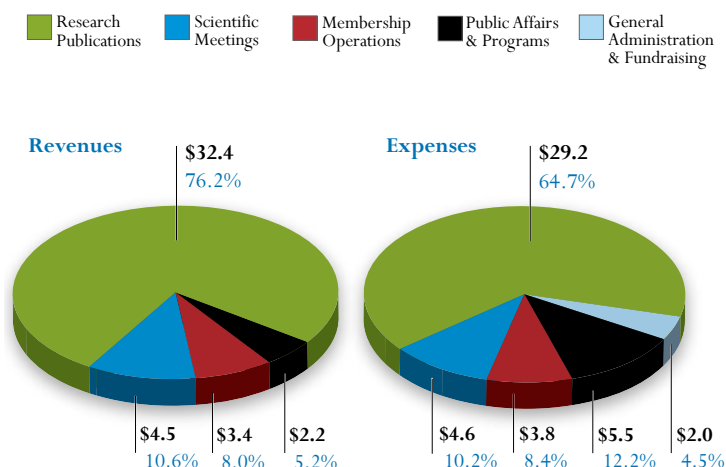
The unrestricted net assets include the Society's operating accounts (cash and cash equivalents), totaling \$18.5M at the end of 2009, and its investments in equities and fixed-income issues. During 2009, these investments increased in market value by approximately 25%, from \$77.0M on 12/31/2008 to \$96.1M on 12/31/2009, reflecting a partial recovery of the financial markets from the crisis in 2008.

Business Continuity Plans (BCPs) are in place for the College Park, Washington D.C., and Ridge offices. The BCPs provide action plans in the event of a disruption of normal operations by natural or manmade events. The BCPs include contact names, checklists of orderly procedures, and plans for off-site operations if necessary. The BCPs are updated annually and a report on their status is made to the audit committee.

#### OPERATING REVENUE & EXPENSES (IN \$M)



#### STATEMENT OF ACTIVITIES (IN \$M)



	2009	2008
<b>ASSETS</b>		
Cash and cash equivalents .....	\$ 18,474,822	\$ 16,968,068
Investments, at fair value .....	96,136,979	77,012,043
Accounts receivable:		
American Institute of Physics .....	4,679,888	3,930,607
Other, net of allowance for doubtful accounts of		
\$87,000 and \$87,000 in 2009 and 2008, respectively .....	1,184,388	777,945
Pledges receivable, net .....	359,581	553,750
Prepaid expenses and other assets .....	628,182	836,762
Equity interest in American Center for Physics .....	1,691,560	1,408,222
Land, building and equipment, net .....	3,456,143	3,738,828
Beneficial interest in perpetual trust .....	460,361	404,391
Total assets .....	<u>\$ 127,071,904</u>	<u>\$ 105,630,616</u>
<b>LIABILITIES AND NET ASSETS</b>		
Liabilities:		
Accounts payable .....	\$ 2,858,824	\$ 2,851,852
Deferred revenues:		
Publications .....	16,469,938	12,608,560
Membership dues .....	2,677,542	2,599,219
Other .....	308,391	58,563
Liability for post-retirement medical benefits .....	11,610,602	10,857,806
Total liabilities .....	<u>33,925,297</u>	<u>28,976,000</u>
Commitments and contingencies		
Net assets:		
Unrestricted .....	81,792,944	65,430,644
Temporarily restricted .....	9,209,778	9,164,086
Permanently restricted .....	2,143,885	2,059,886
Total net assets .....	<u>93,146,607</u>	<u>76,654,616</u>
Total liabilities and net assets .....	<u>\$ 127,071,904</u>	<u>\$ 105,630,616</u>

# STATEMENT OF ACTIVITIES

DECEMBER 31, 2009 & 2008

	2009	2008
Changes in unrestricted net assets		
Revenues		
Research publications .....	\$ 32,374,467	\$ 35,694,609
Scientific meetings .....	4,548,060	3,527,503
Membership operations .....	3,353,002	3,321,681
Public affairs and programs.....	1,470,366	1,652,177
Net assets released from restrictions.....	732,108	432,169
	<u>42,478,003</u>	<u>44,628,139</u>
Expenses		
Program services		
Research publications .....	29,161,623	29,547,269
Scientific meetings .....	4,570,039	3,413,679
Membership operations .....	3,782,105	3,980,972
Public affairs and programs.....	4,790,796	5,300,039
Prizes and related costs .....	732,108	432,169
Total program services .....	<u>43,036,671</u>	<u>42,674,128</u>
Supporting services		
Fundraising .....	456,220	465,670
General and administrative .....	1,572,618	1,679,581
Total supporting services .....	<u>2,028,838</u>	<u>2,145,251</u>
Total expenses .....	<u>45,065,509</u>	<u>44,819,379</u>
Income (loss) from operations .....	<u>(2,587,506)</u>	<u>(191,240)</u>
Non-operating activities		
Income from investments .....	1,586,850	2,803,703
Net unrealized (loss) gain on investments .....	17,322,114	(29,141,865)
Net realized loss on investments.....	(360,903)	(2,283,346)
Equity interest in American Center for Physics.....	283,338	554,158
Change in post-retirement medical benefits other than net periodic post-retirement medical benefit cost.....	118,407	(98,593)
	<u>18,949,806</u>	<u>(28,165,943)</u>
Change in unrestricted net assets .....	<u>16,362,300</u>	<u>(28,357,183)</u>
Change in temporarily restricted net assets		
Contributions .....	139,763	708,988
Income from investments .....	638,037	652,917
Net assets released from restrictions.....	(732,108)	(432,169)
Change in temporarily restricted net assets .....	<u>45,692</u>	<u>929,736</u>
Change in permanently restricted net assets		
Contributions .....	28,029	7,926
Gain (loss) on beneficial interest in perpetual trust .....	55,970	(91,203)
Change in permanently restricted net assets .....	<u>83,999</u>	<u>(83,277)</u>
Change in net assets.....	<u>\$ 16,491,991</u>	<u>\$ (27,510,724)</u>

## 2009 CONTRIBUTIONS & GIFTS

### CORPORATIONS

#### AT&T

Alcatel-Lucent Bell Labs

Dow Chemical Company

Elsevier:

*Journal of Computational Physics*

*Polymer*

*Solid State Communications*

Elsevier Science Ltd

Energy Conversion Devices

General Atomics

General Electric Company

GE Global Research

General Motors Corporation

GE R&D Center

GTE

Herbert V. Friedman Inc.

IBM Corporation

Keithley Instruments, Inc.

Konarka

LG Chemical Ltd

Lockheed Martin

NEC Corporation

PASCO Scientific

Physics Academic Software

Tech-X Corporation

Verizon

Vernier Software

WebAssign

Xerox Corporation

### GOVERNMENTAL AGENCIES & OTHER ORGANIZATIONS

Bipartisan Policy Center

Brookhaven Science Associates

Department of Energy

IEEE Photonics

Massachusetts Institute of Technology

National Science Foundation

Open Society Institute

*Physics of Fluids*, AIP

Stanford University

Southeastern Universities Research

Association

Universities Research Association

University of Iowa

### FOUNDATIONS

Alfred P. Sloan Foundation

Applied Material Foundation

The Camille & Henry Dreyfus  
Foundation

David & Lucile Packard Foundation

Energy Foundation

Elsevier Foundation

GE Foundation

Heineman Foundation

Kavli Foundation

John D. & Catherine T. MacArthur  
Foundation

Lubrizol Foundation

Research Corporation

Richard Lounsbery Foundation

UCLA Foundation

University of Iowa Foundation

**APS IS GRATEFUL FOR CONTRIBUTIONS** from corporations, governmental agencies, national and international labs, foundations and individuals that make possible the numerous activities and programs of the Society.

In 2009, APS benefited from gifts that allowed for the successful completion of its 21st Century Campaign which focused on science education. Contributions also went to the APS annual gift fund, supporting our educational, international and public affairs programs; to new and existing prizes and awards; to the Bequest Society; to special unit funds; to sponsorships for the on-line journal PRST-AB; and to the new campaign in support of LaserFest, a year-long celebration in 2010 of educational and outreach programs marking the 50th anniversary of the laser.

In the spring of 2009, the APS Board and Council celebrated the completion of the 21st Century Campaign which raised \$4.3 M, significantly surpassing its goal of \$3.5 M. The Campaign's funds support APS programs that improve science education, inspire teachers and students, and attract greater numbers of women and under-represented minorities to the sciences. More specifics about these programs is available at [www.aps.org/about/support/index.cfm](http://www.aps.org/about/support/index.cfm).

A new campaign was launched to obtain sponsors for the educational programs of LaserFest which is being carried out jointly with three other founding partners: OSA, IEEE Photonics and SPIE. This Campaign has secured numerous gifts and will complete its efforts by mid-2010. Please see [www.laserfest.org](http://www.laserfest.org) for more information.

Development provided fund raising support to the following APS prizes and awards in 2009: Maxwell Prize, Bouchet Award, Ovshinsky Travel Grant Fund, Plyler Prize, Polymer Prize (now endowed by Dow Chemical starting in 2010) and the Davisson-Germer Prize. Activity on many of these will carry over into 2010.

Planned giving to the Society was promoted in 2009 through an Estate Planning Session at the March meeting in Pittsburgh, PA. Additionally, the Development Office distributes planned-giving brochures throughout the year to APS members letting them know of opportunities to include APS in their estate plans. The Bequest Society continues to welcome new members, and interested individuals are encouraged to contact the Development Office to discuss options. A large bequest intent was received in conjunction with the completion of the 21st Century Campaign which will provide future funding of \$1 million for the Minority Scholarship Program.

Annual giving as part of membership renewals and a year end mailing continues to provide substantial support to key APS programs. Annual giving to the Society is approximately \$300,000. Development continues to host APS Fellow receptions in key cities and held two such receptions in 2009 in New York and Washington, DC.

We are grateful to all donors to the Society and are pleased to provide special recognition to those contributing a total of \$100 or more in 2009 by listing their names in this Annual Report.



**Individuals who  
contributed \$50,000  
or more**

Anonymous (2)  
Gordon Moore  
Stanford Ovshinsky

**Individuals who  
contributed  
\$5,000-\$49,999**

Anonymous (1)  
Martin Blume  
William Brinkman  
Kenton Brown  
Mildred Dresselhaus  
Robert C. Dynes  
Hans Frauenfelder  
Herbert Friedman  
Larry Gladney  
Gerry Lenfest  
Cherry Murray  
Norman Rostoker  
Brian Schwartz  
Aleksandar Svager  
Virginia Trimble

**Individuals who  
contributed  
\$1,000-\$4,999**

Peter Adams  
Alice Adler  
Christina Back  
John Deneufville  
Judy & Frank Franz  
Kenneth Friedman  
Roderick Grant  
Robert Griffiths  
Philip & Donna  
Hammer  
Charles Han  
Beverly Karplus  
Hartline  
W. Hassinger  
Elizabeth Karplus  
Jacob Klein  
Daniel Kleppner  
Neal Lane  
James Langer  
Robert Lourie  
Patricia Mooney  
Frederick Raab  
Robert Reasenberg  
Norman Rostoker  
Joseph W. Serene  
Robert Shafer  
Laura Smoliar  
Timothy Trucano  
Donat Wentzel  
Philip Wyatt

**Individuals who  
contributed  
\$500-\$999**

Anonymous (3)  
James Bardeen  
William Bardeen  
Elizabeth Beise  
Herbert Berk  
J. Birman  
Philip Bucksbaum

Benjamin Chao  
Roger Dixon  
R. Paul Drake  
Val Fitch  
Marshall Fixman  
Carl Gagliardi  
Thomas Greytak  
Theodore Hodapp  
E. Jossem  
William Keller  
L. Kisslinger  
Miles Klein  
Chun Lin  
Gabrielle Long  
Akiyasu Makishima  
Joseph Mantil  
D. McWhan  
Horst Meyer  
Ernest Moniz  
Burton Richter  
Rudy Ruggles  
James Scofield  
Charles Sommerfield  
Stephen Tether  
Edwin L. Thomas  
Mark Wiedenbeck  
Bing Zhou

**Individuals who  
contributed  
\$250-\$499**

Anonymous  
Neal Abraham  
Stephen Adler  
Renate Albat  
Konrad Aniol  
Frank Avignone  
Ali Belkacem  
Otto Bergmann  
Amitava Bhattacharjee  
Arnold Bodmer  
Eric Braaten  
Charles Brau  
Alan Breakstone  
Spencer Buckner  
Theodore Burkhardt  
David Cassel  
Sudip Chakravarty  
Edward Chupp  
Jack Colwell  
Kenneth Crebbin  
Donald Curran  
B. Durand  
Loyal Durand  
Donald Edwards  
Helen Edwards  
Estia Eichten  
William Evenson  
R. Fedosejevs  
Leonard Feldman  
Alexander Fetter  
Zachary Fisk  
James Fry  
Wendy Fuller-Mora  
Mary Gaillard  
Hyatt Gibbs  
Forrest Gilmore  
George Ginther  
E. Goldwasser  
Bernard Gottschalk

Christopher Gould  
Harvey Gould  
R. Greene  
H. Griem  
Bertrand Halperin  
Marianne Hamm  
Robert Hamm  
Luisa Hansen  
R. Hart  
Judith Harte  
Dieter Hartmann  
Richard Hazeltine  
Warren Heckrotte  
Conyers Herring  
Jonathan Hoffman  
Carlos Hojvat  
Joseph Hook  
Timothy Houck  
Evelyn Hu  
Samson Jenekhe  
Michael Jones  
Malvin Kalos  
Tetsuo Kaneko  
Lewis Keller  
T. Kinoshita  
Seiki Komiya  
Rikio Konno  
Alan Krisch  
Siu-Au Lee  
Anthony Leggett  
D. R. Lehman  
Roy Leigh  
Thomas Lemberger  
Anthony Leonard  
Harry Letaw  
Marvin Litvak  
Michael Lubell  
Thomas Marshall  
Philip Martzen  
Michael Mauel  
Robert Maurer  
Frank McDonald  
James Meyer  
Frederick Mills  
Toney Minter  
Ichiro Miyagawa  
Michael Moldover  
Bogdan Nedelkoff  
Philip Nielsen  
Wayne Niemuth  
David Nygren  
Jon Opsal  
Douglas Osheroff  
Michael Peskin  
Harry Peters  
Stephen Pordes  
Edward Redish  
John Rees  
Mindla Rosen  
Carl Rosenfeld  
Lawrence Rubin  
Juerg Saladin  
Myriam Sarachik  
Stephen Schiff  
Roy Schwitters  
David Seiler  
Paul Shepard  
Charles Sinclair  
Andris Skuja  
Farren Smith

Keith Solberg  
Raymond Stefanski  
Gerard Stephenson  
Edward C. Stone  
James Strait  
R. Strombotne  
David Strozzi  
Laurance Suter  
Doris Teplitz  
John Robert Thompson  
D. Thouless  
Alvin Tollestrup  
Bruce Worster  
N. Wyeth  
Dave Youngblood  
Bruno Zumino

**Individuals who  
contributed  
\$100-\$249**

Anonymous (10)  
Ali AbuTaha  
Frank Adams  
Lewis Agnew  
Glenn Agnolet  
Richard Ahrenkiel  
Daniel Akerib  
Lawrence Akers  
Carl Albright  
Jonathan Allen  
Margaret Alston-  
Garnjost  
Orlando Alvarez  
James Ambrose  
Marco Ameduri  
Ansel Anderson  
Gordon Anderson  
Oscar Anderson  
Robert Anderson  
Roger Anderson  
Weston Anderson  
Brian Annis  
John Antal  
John Apruzese  
Michael Arenton  
Joseph Argento  
Murray Arnow  
Samuel Aronson  
Kichizo Asai  
David Aston  
Daniel Auerbach  
Richard Averitt  
Wesley Ayres  
Dionys Baeriswyl  
Brian Bagley  
Coral Baglin  
John E. Baglin  
John Baker  
Samuel Baker  
David Balamuth  
Akif Balantekin  
James Ball  
Alexis Baratoff  
Troy Barbee  
Lynn Barker  
Marion Barker  
Aaron Barnes  
Norman Barnett  
David Bartlett  
Donald Batchelor

**NATIONAL & INTERNATIONAL  
LABORATORIES**

Argonne National Laboratory  
Brookhaven National Laboratory  
Cockcroft Institute  
CNRS-IN2P3  
Cornell University-Laboratory for  
Elementary Particle Physics (LEPP)  
Deutsches Elektronen-Synchrotron  
(DESY)  
European Organization for Nuclear  
Research (CERN)  
Fermi National Accelerator  
Laboratory  
Gesellschaft für Schwerionenforschung  
mbH (GSI)  
INFN - Laboratori Nazionali del Sud  
INFN - Laboratori Nazionali di Frascati  
INFN - Laboratori Nazionali di Legnaro  
The John Adams Institute for  
Accelerator Science  
KEK, High Energy Accelerator  
Research Organization  
Lawrence Berkeley National  
Laboratory  
Lawrence Livermore National  
Laboratory  
Los Alamos National Laboratory  
National Superconducting Cyclotron  
Laboratory at Michigan (NSCL)  
Oak Ridge National Laboratory  
Princeton Plasma Physics Laboratory  
(PPPL)  
Stanford Linear Accelerator Center  
(SLAC)  
Thomas Jefferson National Accelerator  
Facility  
TRIUMF

**PRIZE, AWARD & OTHER ENDOWMENTS**

Charlotte Anderson  
John & Elizabeth Armstrong  
Jean Dickey Apker  
Esther Hoffman Beller  
M. Hildred Blewett  
Chope Family Trust  
Russell & Marian Donnelly  
David Lee  
Beatrice Lilienfeld  
Ruth Marshak  
Family & Friends of J.J. Sakurai  
Family and Friends of Mitsuyoshi  
Tanaka  
John Dawson Fund  
George E. Valley, Jr.  
APS Units, Family, Friends &  
Colleagues

Laura Bautz	Colston Chandler	Robert Diebold	Martin Fritts	Ryusuke Hasegawa	Lawrence Jones
Louis Beach	Premala Chandra	Dirck Dimock	Mary Fuka	Edward Haugland	Thomas Jones
Bret Beck	Chellis Chasman	Michael Dine	Jose Fulco	Jack Haugsnes	G. Joyce
Donald Beck	Michael Cherry	H. Dixon	S. Fung	M. Hauser	O. Judd
Kevin Bedell	I-Hung Chiang	Lance Dixon	Robert Furber	Andrew Hazi	Q. Kaiser
J. Bednorz	Shirley Chiang	J. Doane	Richard Furnstahl	Arthur Hebard	Hiroshi Kamimura
James Beene	Chia-Ling Chien	Jack Dodd	John Gaiser	L. Hebel	Chester Kamin
Nicholas Begovich	Leo M. Chirovsky	Heinz-Dietrich	John Galayda	Ann Heinson	David Karraker
Roy Benedek	Alan Chodos	Doebner	Edward Gardner	Leon Heller	Marc Kastner
Richard Benjamin	John Clark	John Domingo	Richard Garner	Arthur Hemmendinger	Tomokazu Kato
A. Beretvas	W. Clark	Janis Dote	Timothy Gay	Philip Hemmig	Tom Katsoules
Beverly Berger	Arthur Clawson	Alex Dragt	Clayton Gearhart	James Hendrickson	Allan Kaufman
Luc Berger	James Clendenin	Lawrence Dries	Daniel Gee	Robert Hengehold	Richard Kautz
Abraham Berlad	A. Clogston	Adam Drobot	Donald Geesaman	Walter Henning	Boris Kayser
Henry Berry	Thomas Coan	Charles Dunn	Peter Gehring	Steve Herb	William Keery
Lee Berry	C. Cocke	John Eades	Walter Gekelman	Cal Herrmann	Leonid Keldysh
R. Berry	C. Coffin	Philippe Eberhard	Eugene Gellert	Daryl Hess	Michael Kelley
Theodore Biewer	Morrel Cohen	Thomas Eck	Howard Georgi	Roger Hess	Henry Kelly
George Bing	Ronald Cohen	Robert Ecke	Bernd Gerlach	Michael Hibbs	Kirby Kemper
Robert Birkmire	Lawrence Coleman	Stanley Ecklund	Bruce Gibbard	Takekoshi Hidekuni	J. Kendall
James Bjorken	Mark Coles	Lewis Edelheit	Lawrence Gibbons	Bernard Hildebrand	Andrew Kent
Julio Blanco	Stirling Colgate	David Ederer	George Gidal	John Hill	Donald Kerr
Martin Block	Lee Collins	Ariel Edery	Sarah Gilbert	David Hobill	Teng Khoo
Arnold Bloom	Reuben Collins	Alan Edwards	Stephen Gill	M. Hockaday	N. Khuri
Louis Bloomfield	William Collins	Vernon Ehlers	P. Gillette	Allan Hoffman	Dae Kim
David Bodansky	John Connell	Theodore Einstein	Ronald Gilman	Nelson Hoffman	Jin-Soo Kim
Gregory Boebinger	Esther Conwell	Elmer Eisner	Joseph Giordmaine	Gary Hogan	Kwang-Je Kim
Henry Bohm	Benjamin Cooper	Robert Elgin	Jonathan Gittleman	R. Holland	Yong Kim
Peter Bond	Pierce Corden	Mark Ellenberger	Charles Glashauser	Wayne Holman	Charles King
Xavier Bonnin	Donald Correll	Celia Elliott	Sharon Glendinning	Richard Holmes	Thomas King
Frederick Borcharding	George Coulter	Stephen Ellis	Henry Glyde	Roy Holt	Kate Kirby
Paolo Bordone	Ernest Courant	Latifa Elouadrhiri	Brendan Godfrey	Natalie A. Holzwarth	O. Kistner
Randy Bos	Robert Cousins	Richard Elrick	Robert Godwin	Gerard Honore	Alfred Kleinhammes
Theodore Bowen	James Cox	John T. Ely	Howard Goldberg	Ruth Howes	John Klepeis
Walton Boyer	Floriana Craciun	Guy Emery	Michael Golde	Alan Howsmon	William Klink
John Bozek	David Crandall	Vadim Emtsev	Allen Goldman	Klaus Huber	James Knauer
Hale Van Bradt	Bernd Crasemann	Ronald Enstrom	Raymond Goldstein	Bruce Hudson	James Knudson
Alan Brailsford	Michael Creutz	Kenneth Epstein	Jeffrey Goldstone	David Hudson	H. Koch
Helmut Brand	Louis Creveling	Dennis Erickson	Jerry Gollub	Gerald Huffman	Richard Kofler
LeAnn Brasure	Roger Crouch	Glen Erickson	Norberto Goncalves	Thomas Hughes	Noemie Koller
Martin Breidenbach	Paul Crowell	Kazuyuki Etoh	Bernard Goodman	Rusty Humphrey	Victor Korenman
Manuel Bretscher	Peter Cziffra	Robert Euwema	Alfred Goshaw	William Humphrey	Jan Korringa
David Brice	Orin Dahl	Viktor Evtuhov	Harvey Gould	Winifred Huo	Ahovi Kponou
Frank Bridges	Timothy Darling	Edward Eyler	Tsahi Gozani	James Hurt	James Krebs
George Briggs	Anne Davenport	Sandra Faber	Henry Greenside	Mark Hybertsen	Franz Krejs
John Bronzan	Lee Davenport	Henry Fairbank	Gary Grest	Jay Hyman	Herbert Kroemer
Ellen Brown	Cary Davids	Joel Fajans	D. Grether	Hiroshi Ichise	Andreas Kronfeld
Hugh Brown	James Davis	L. Farrow	D. Grischkowsky	Kenji Iijima	John Kruger
Robert Brown	Jay Davis	James Faulkner	Donald Groom	Gerhard Ingold	Atsushi Kubo
Robert J. Brown	L. Davis	David Fenner	Robert Gross	Akira Inomata	Kuniharu Kubodera
John Browne	Marc Davis	Stephen Ferguson	Dina Gutkowicz-Krusin	Tom Intrator	Helmut Kuehl
Betty Bruhns	Richard Davis	Thomas Ferguson	Rudolf Hackl	Muhammad Islam	Kitazaki Kuniaki
Howard Bryant	William Davis	John Ferron	Willy Haeberli	Ralph Isler	Kai Lai
Richard Bukrey	Senarath De Alwis	Robert Field	Mark Hagen	Wayne Itano	Frederick Lamb
Bruce Bunker	Pablo Debenedetti	Edward Finn	Richard Haglund	Masat Izu	P. Lambropoulos
Grant Bunker	Paul Debevec	Alexander Firestone	Sharon Hagopian	H. Jackson	Martin Lampe
Eric Butcher	Daniel Decker	David Fischbach	Vasken Hagopian	Howard Jackson	David Land
Charles Campbell	James Degnan	Charlotte Fischer	Robert Haight	W. Jackson	Gerard Lander
Corrado Cardarelli	Walt Deheer	William Fogle	Frederick D. Haldane	Israel Jacobs	Harry Landon
Lawrence Cardman	Marie-Agnes Deleplanque-Stephens	Guy Fogleman	John Hall	William Jacobs	Jean Lane
Thomas Carlstrom	John Delos	Jerry Forbes	Maclin Hall	Bernardo Jaduszliwer	Louis Lanzerotti
Allen Carroll	Marten Den Boer	E. Fortson	Robert Hall	David James	Michael LaPointe
Boyd Cary	Jacques Denavit	W. Fowler	Gerald Harp	Anthony Johnson	John Larabee
Susan Casabella	Jacques Destry	William Fowler	Frederick Harris	Philip Johnson	Rudolf Larsen
James Castiglione	Murray Deutsch	Ricardo Francke	Richard Harris	Rolland Johnson	James Larson
J. Cathcart	Richard Dexter	William Frazer	Michael Harrison	Lawrence Johnston	Barbara Lasinski
Carlton Caves	David DeYoung	Robert Friauf	H. Hart	J. Jonas	Thomas Lasinski
Peter Celliers	Paul Dickson	Joshua Frieman	Terry Harter	Keith Jones	Gary Later
Pei Chan	Duane Dicus	Klaus Fritsch	Mazhar Hasan	Kevin Jones	John Lawrence
Jagdish Chander		Lothar Fritsche	Masayuki Hasegawa		R. Lawrence
					Norman Lazar

Donald Lazarus	Gregory Meisner	Herbert Ovshinsky	Kenneth Rose	Paul Spencer	David Vanderbilt
Leon Lederman	Robert Mercer	Satoshi Ozaki	Peter Rose	Joel Spira	John Venables
Keum Lee	Eugen Merzbacher	Alan Palevsky	Bruce Rosenblum	Gene Sprouse	F. Vestner
Warren Legler	Sydney Meshkov	C. Palmer	Martin Rosenblum	Richard Squire	Harold Vinegar
Dietrich Leibfried	Fred Meyer	Victor Pare	Jonathan Rosner	Stephen St John	Silvia Volker
Cecil Leith	Jerry Meyer	Robert Park	David Ross	Barry Stallard	Tycho Von
Gabriel Lengyel	Richard Milburn	Eugene Parker	Forest Rouse	Anthony Starace	Rosenvinge
Frieder Lenz	Louis Milgrom	William Parker	J. Rowe	Stephen Steadman	Richard Wachnik
G. Lepage	D. Millener	Charles Parmenter	Morton Rubin	Ronald Stearns	François Waelbroeck
Jeffrey Lerner	Dan Miller	C. Kumar Patel	Randal Ruchti	E. Otto Steinborn	Douglas Wake
Jacques Leveille	G. Miller	Ritchie Patterson	Anne Rumfelt	Richard Steiner	Walter Wales
Judah Levine	John Missimer	Roberto Peccei	Dmitri Ryutov	Frank Stephens	Kameshwar Wali
Nicholas Levinos	Joan Mitchell	Robert Peelle	Richard Saenz	George Serman	James Walker
David Liberman	John Mitchell	John Peoples	Chih-Tang Sah	David Stern	Bennie Franklin Ward
Zvie Liberman	George Mitev	Arnold Perlmutter	Virahat Sahni	Frank Stern	N. Wardle
Peter Limon	H. Moffatt	Udo Pernisz	Makoto Saito	Morton Sternheim	Takeshi Watanabe
Li-Jen Lin	Kenneth Moffeit	Murray Peshkin	Teijiro Saito	Melbourne Stewart	David Webb
Erick Lindman	David Moir	Roy Pettis	Mitsuo Sakai	Michael Stitelman	Richard Webb
Karen Lingel	Tor Moksvold	Wayne Pfeiffer	W. Sapp	Ian Stockdale	Xiangdong Wei
Richard Linnell	Guillermo Monsivais	Arthur Phelps	Wayne Saslow	Edward Strait	Matthew Weidmann
Ming-Kung Liou	Stephen Montgomery	David Phillips	Ken Sato	Alan Strauss	George Weiss
Cole Litton	Thomas Moore	Julia Phillips	Etsuro Sawaguchi	J. Streetman	Harold Weitzner
Stewart Loken	F. Mooring	Thomas Phillips	Douglas Scalapino	Stanley Stynes	Jasper Welch
Frances Lopata	Charles Morehouse	Stanley Pickart	Richard Scalettar	Evan Sugarbaker	H. Weldon
William Losonsky	Larry Morford	Jorge Piekarewicz	Michael Schaffer	Harry Suhl	Ulrich Welp
Richard Loveless	Robert Morris	Steven Pieper	Heidi Schellman	Robert Suter	David Wensky
Zheng-Tian Lu	David Morrow	Jose Piffaretti	Dietrich Schinzel	Richard Sutherland	Richard Werbeck
Michael Lubin	Steven Moss	David Piston	Eric Schlegel	Paul Sutton	Frank Werner
Peter Lucas	Steven Moszkowski	Joseph Platt	Joerg Schmalian	Robert Swanson	Christopher
Harry Lustig	Toshio Motoba	Joseph Polchinski	Roland Schmitt	Paul Swartz	Wesselborg
Vera Luth	Theodore Moustakas	Ray Pollock	Klaus Schroder	Mary Ann Sweeney	Alan Wetmore
John Luthé	George Mueller	John Poucher	John Schroeder	Harry Swinney	William Wheaton
David Lynch	Paul Mueller	Lawrence Price	Lee Schroeder	Abraham Szoke	John Wheeler
Joseph Macek	Gregory Mulhollan	Morris Pripstein	Michael Schulz	G. Taggart	Herman White
James MacLachlan	Joe Mullins	Philip Pritchett	Richard Sciambi	Hideaki Takayanagi	John White
Douglas MacLaughlin	Masanori Murakami	Robert Prohaska	Hugh Scott	Kunihiko Takeyama	Edward Whittaker
Kemp Maer	Donald Murphy	Derek Pursey	Benjamin Segall	Morris Tanenbaum	Herman Wieder
Charles Maguire	Mohammed Mustafa	Kedar Pyatt	Stephen Seiffert	David Tanner	Carl Wieman
S. Mahanti	Mark Nagumo	Chris Quigg	Wolf Seka	John Tanner	Willard Winn
Ernest Malamud	Fady Najjar	Brian Quinn	Raymond Seraydarian	Theodore Tarbell	Brenda Winnewisser
Stanley Mandelstam	Ichiroh Nakada	Robert Rader	Andrew Sessler	Janet Tate	Manfred Winnewisser
Harry Mann	Yoichiro Nambu	David Rahm	Peter Shaffer	Haskell Taub	Dan Winske
John Marburger	Sumita Nandi	Waldo Rall	Stephen Shafroth	Uwe Tauber	Thomas Winter
Robert March	Yoshimasa Narahara	Frederick H.	Robert Shalek	Jan Tauc	Robert Wiringa
Eugene Margerum	Albert Narath	Rambow	Lu Sham	Lee Teng	Stanley Wojcicki
Robert Markiewicz	Venkatesh	Simon Ramo	Stephen Shapiro	Jerry Tersoff	Stephen Wolbers
Diane Markoff	Narayanamurti	P. Rao	Melvin Shaw	Peter Thieberger	Henry Wong
Paul Martin	A. Nathan	R. Rau	Marleigh Sheaff	Friedrich Thielemann	John Wood
C. Mate	Joseph Natowitz	Richard Rauch	Stephen Shenker	David Thomas	Louvan Wood
John Mather	Vitali Nesterenko	Robert Ray	Bruce Sherwood	Maury Tigner	Harry Woodcock
Wesley Mathews	David Newell	Robert Rediker	Koichi Shimoda	Murray Tobak	Michael Wortis
Suresh Mathur	Riley Newman	Sidney Redner	Yoshihiko Shono	Alan Todd	Byron Wright
Carlo Mattoni	Won-Keng Ng	Robert Redwine	Howard Shugart	Carl Tomizuka	Ying Wu
M. Keith Matzen	Paul Nielsen	Don Reeder	Edward Siciliano	Philip Tomlinson	Karen Xie
Harris Mayer	Hiroaki Nishimura	Leonard Reiffel	Manfred Sigrist	John Tranquada	Ryuji Yamada
John McCarthy	John Noe	William Reinhardt	Arnold Silver	Basil Tripsas	Robert Yamartino
Kevin McCarty	Jerry Nolen	Howard Reiss	Eugen Simanek	Jean-Marc Triscone	Yin Yeh
Edward McCliment	Eric Norman	Ronald Rendell	Pekka Sinervo	James Tsang	Sigfrid Yngvesson
Harden McConnell	Wesley Nyborg	Glenn Reynolds	Charles Slichter	Frank Turkot	Ellen Yorke
Lillian C. McDermott	Kaare Nygaard	Peter Reynolds	John Slonczewski	Michael Turner	Linda Young
Ronald McFee	Felix Obenshain	James Rhyne	R. Slusher	Robert Turner	Hyuk Yu
Malcolm McGeoch	John O'Brien	Aurino Ribeiro Filho	Donald Smith	Robert Tycko	Peter Yu
Chris McKee	Thomas O'Halloran	David Rice	George Smith	Henry Tye	William Zajc
Robert McKibben	Hidetoshi Okada	James Rice	Harold Smith	James Tyler	Michael Zeller
Hugh McManus	Koji Okano	Robert Richardson	James Smith	Allan Tylka	George Zimmerman
Laurie McNeil	Robert Olness	Edward Richley	Robert Smith	Arthur Uhlir	William
Thomas Mehlhorn	Stephen Olsen	Matthew Richter	Steven Smith	John Ullmann	Zimmermann
Robert Meier	Tore Olsen	Daniel Riley	Todd Smith	Sergio Ulloa	Paul Zitzewitz
Forrest Meiere	A. Opp	Rogers Ritter	Joshua Socolar	Sukekatsu Ushioda	John Zumbro
Paul H. Meijer	Grant O'Rielly	R. G. Robertson	George Soli	Karl Van Bibber	
Matthew Meineke	Louis Osborne	John Romero	Glenn Sowell	John Vander Velde	

## 2009 APS OFFICERS

---

*President*

Cherry Murray  
Lawrence Livermore National Laboratory

*President-Elect*

Curtis Callan, Jr.  
Princeton University

*Vice President*

Barry Barish  
California Institute of Technology

*Past President*

Arthur Bienenstock  
Stanford University

*Executive Officer*

Judy R. Franz  
University of Alabama, Huntsville  
(on leave)

*Treasurer*

Joseph W. Serene  
Georgetown University  
(Emeritus)

*Editor-in-Chief*

Gene Sprouse  
Stony Brook University  
(on leave)

## 2010 APS OFFICERS

---

*President*

Curtis Callan, Jr.  
Princeton University

*President-Elect*

Barry Barish  
California Institute of Technology

*Vice President*

Robert L. Byer  
Ginzton Laboratory

*Past President*

Cherry Murray  
Harvard University

*Executive Officer*

Kate Kirby  
Harvard-Smithsonian Center for Astrophysics  
(retired)

*Treasurer*

Joseph W. Serene  
Georgetown University  
(Emeritus)

*Editor-in-Chief*

Gene Sprouse  
Stony Brook University  
(on leave)

---

AMERICAN PHYSICAL SOCIETY