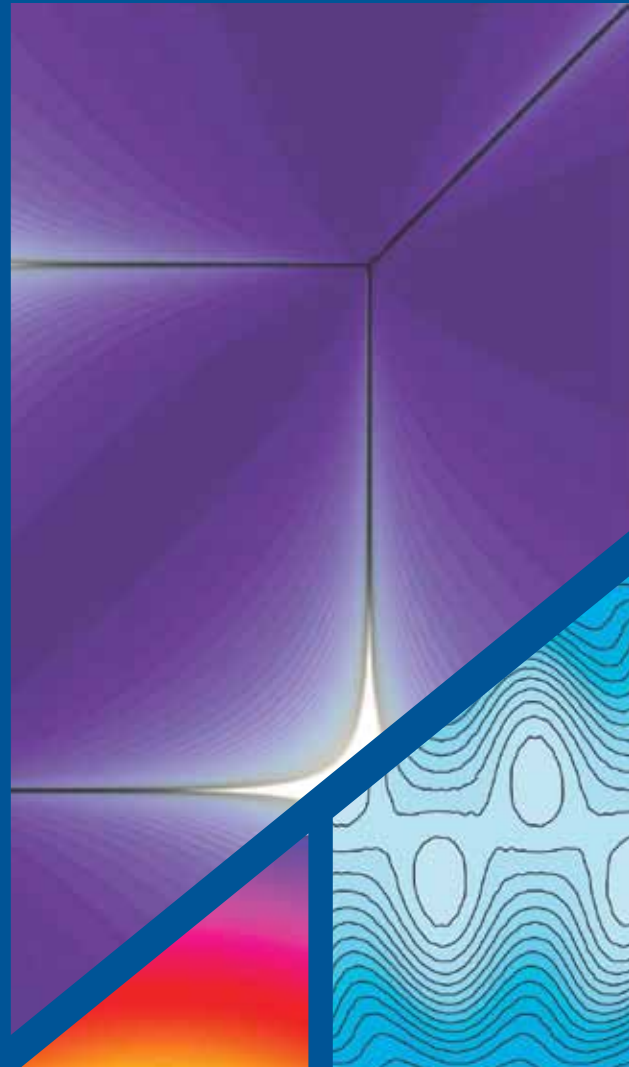
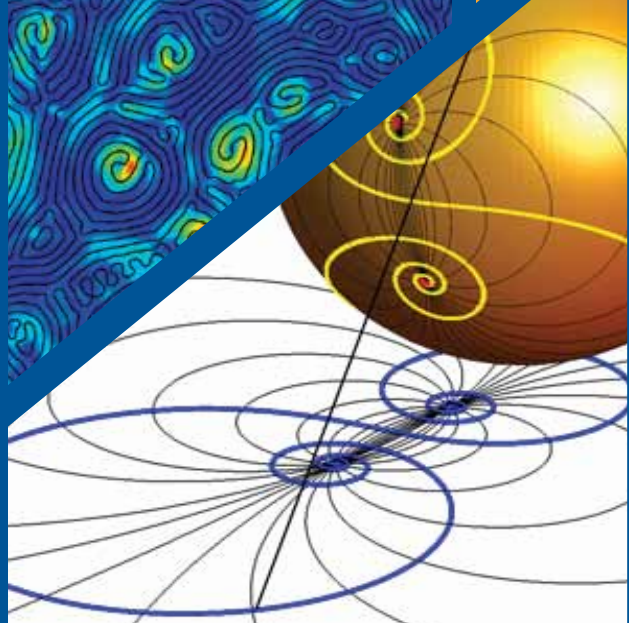
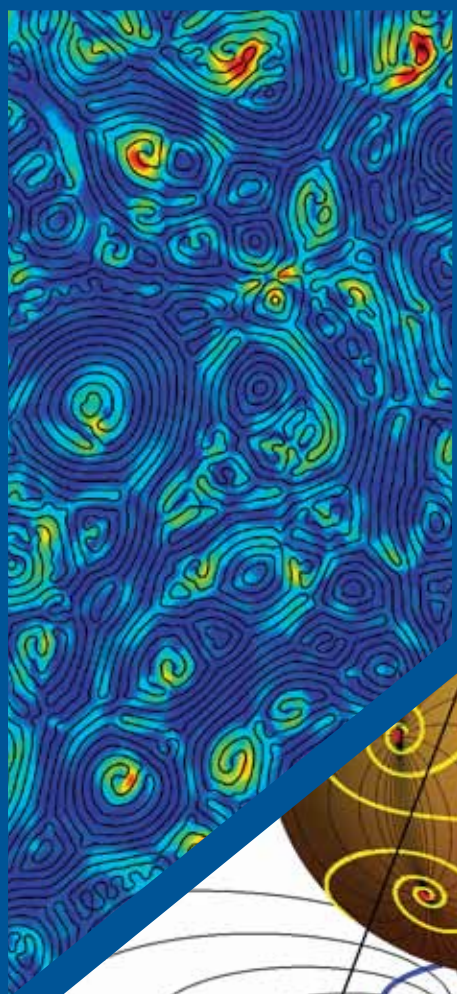
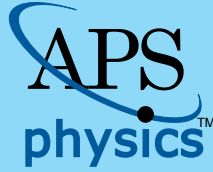


AMERICAN PHYSICAL SOCIETY



2011 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 images (clockwise beginning at top right): *a*: Von Neumann entropy of the one-dimensional XYZ spin- $\frac{1}{2}$ chain. [E. Ercolessi, S. Evangelisti, F. Franchini, and F. Ravanini, Phys. Rev. B **83**, 012402 (2011)] *b*: Spherical map of the charge density around a Li-atom impurity in α -rhombohedral B. [H. Dekura, K. Shirai, and A. Yanase, Phys. Rev. B **84**, 094117 (2011)] *c*: Near-field phase singularity in subwavelength metallic microstructures. [Ming Kang, Qing-Hua Guo, Jing Chen, Bing Gu, Yongnan Li, and Hui-Tian Wang, Phys. Rev. A **84**, 045803 (2011)] *d*: Geometrical interpretation of optical absorption. [J.J. Monzón, A.G. Barriuso, L.L. Sánchez-Soto and J.M. Montesinos-Amilibia, Phys. Rev. A **84**, 023830 (2011)] *e*: Exploring spiral defect chaos in generalized Swift-Hohenberg models with mean flow. [A. Karimi, Zhi-Feng Huang, and M. R. Paul, Phys. Rev. E **84**, 046215 (2011)] *f*: Homoepitaxial growth on Ir(111). [S. Bleikamp, J. Coraux, O. Robach, G. Renaud, and T. Michely, Phys. Rev. B **83**, 064103 (2011)]. *Image page 2*: Same as cover image b *Image page 3*: The red and blue regions represent two parts of a dimer crystal structure for truncated tetrahedra. The dimers are arranged here in a periodic structure with a packing fraction of 0.988. [J. de Graaf, R. van Rooij, and M. Dijkstra, Phys. Rev. Lett. **107**, 155501 (2011)] *Image page 4*: Dynamics and morphology of dendritic flux avalanches in superconducting films. [J. I. Vestgård, D. V. Shantsev, Y. M. Galperin, and T. H. Johansen, Phys. Rev. B **84**, 054537 (2011)] *Image page 5*: Alfvén waves and ideal two-dimensional Galerkin truncated magnetohydrodynamics. [G. Krstulovic, M. Brachet, and A. Pouquet, Phys. Rev. E **84**, 016410 (2011)] *Image page 6*: Prospects of coherent control in turbid media: Bounds on focusing broadband laser pulses [E. Shapiro, T. Drane, and V. Milner, Phys. Rev. A **84**, 053807 (2011)] *Image page 8*: Assembly of triangular bipyramids forming a dodecagonal quasicrystal in Monte Carlo simulations. [A. Haji-Akbari, M. Engel, and S. Glotzer, Phys. Rev. Lett. **107**, 215702 (2011)] *Image page 9*: Same as cover image e *Image page 10*: False-color scanning electron microscope image of a tooth from the Florida sea urchin *Arbacia punctulata*; each tooth element is highlighted by a different color and is a single crystal of calcite (Pupa Gilbert, Univ of Wisconsin-Madison). *Image page 11*: Same as cover image c *Image page 12*: Artificial gauge field for photons in coupled cavity arrays. [R. O. Umucalilar and I. Carusotto, Phys. Rev. A **84**, 043804 (2011)] *Image page 13*: Same as cover image f.



FROM THE PRESIDENT

Last year was a very good one for the APS. Our core activities have continued at a high level; our journals continue to be the leading journals in the world and our major meetings are well attended and have exciting scientific programs. The APS finances and membership are stable and growing; our programs in outreach, education, government relations and science policy are thriving. Overall, we can be proud that the APS is serving physics and the physics community very well.

Nevertheless, the future presents us with new challenges, and to meet them we are in the process of developing a new strategic plan for the APS. This plan will be brought to the broader membership in the coming months and will serve as a roadmap for the next five years.

New programs or changes in emphasis for a large organization like the APS generally take longer than one presidential year. Therefore, an absolutely crucial aspect of successfully evolving the APS for the future is for the entire presidential line and APS operating officers to work together on a set of common goals, and over a period of years. The strategic plan will formalize our goals for the next few years, but in fact, some important new initiatives are already underway.

Publishing is the largest APS activity, and, despite the rapid conversion to electronic publishing, we have outgrown the current editorial offices in Ridge, New York, as the journals have continued to expand. Based on projections of future space needs and after investigating possible options, we have decided to add a second story to the Ridge facility. The Executive Board and Council approved this expansion, we have developed an attractive design, employed an experienced contractor, and are now completing the last formalities, before beginning construction. The new Ridge facility should be completed by summer of 2013.

Another long term issue that faces scientific publishing is how to approach the movement toward “open-access” journals. This is a very fluid situation and one where we must take the lead, in order to insure that whatever changes are instituted, we

maintain the high quality of our journals and that they remain financially viable. We have taken an important step during the past year by introducing *Physical Review X*, a new online-only, open access, author pays, interdisciplinary physics journal. We have appointed an outstanding editorial board for *PRX* and have established high standards for accepted articles.

The second largest APS activity is our very successful set of scientific meetings. We plan to reevaluate the entire suite of meetings, as well as to enhance them by employing modern tools to post and/or live stream talks. We performed a pilot test program at the April meeting last spring, electronically posting talks from invited sessions. The number of hits and downloads of those talks impressively demonstrated how this will extend the reach and importance of our meetings.

We are responding to the realization that we have a growing membership living outside the U.S., now over 20%. To serve this constituency better we increased non-US resident members serving on the APS Council, and we are working to increase their number on standing APS committees. Other steps we are considering include forming partnerships with foreign physical societies and holding meetings outside the US.

I will end on a personal note. As a young physics graduate student I joined the APS and gave my first oral presentation at what was then the New York meeting. Throughout my career in physics, the APS served as my professional home and, in addition to presenting and publishing my research, it has provided me with opportunities to grow by participating in its broader activities. APS has served me well, and I am very happy to have had the opportunity to contribute to APS by serving as its President for 2011.

A handwritten signature in black ink that reads "Barry C. Barish". The signature is written in a cursive, slightly slanted style.

Barry C. Barish
APS 2011 President



RESEARCH PUBLICATIONS

Open access initiatives and plans to expand made for more choices, more information, high expectations, and uncertainty.

In early February, a new public access initiative gave high school students and teachers in the US access to all online APS journals. The high school program was a natural follow on to the previous summer's offering to US public libraries. High school teachers or librarians can obtain access by accepting a simple online site license and providing IP addresses of public-use computers in their school or school library. Initially the program is limited to the US, but it may be extended to high schools in other countries in the future.

On 15 February, authors in most *Physical Review* journals gained a new alternative: to pay an article-processing charge (\$1700 for *Physical Review* and \$2700 for *Physical Review Letters*) whereby accepted manuscripts become available barrier-free and open access on publication. These manuscripts are published under the terms of the most permissive of the Creative Commons licenses, granting authors and others the right to copy, distribute, transmit, and adapt the work, provided that proper credit is given. This alternative is in addition to traditional subscription-funded publication; authors may choose one or the other for their accepted papers. The resulting open access articles will appear alongside and mixed in with subscription-funded articles, converting these journals to 'hybrid' open access journals.

The article-processing fee/Creative Commons project had required a complete redesign of the permissions and payment systems that authors use, new policies for the two Special Topics journals, and a staged end to the Free to Read program. Staff in Editorial, Journal Opera-

tions, and Journal Information Systems worked intensely for several months prior to the project's release to create, implement, and test all the new processes.

After a year's gestation, a new open-access journal called *Physical Review X* joined the APS family with its first publications appearing in August. *PRX* is supported by a \$1500 article-processing charge to authors or their institutions, and features high standards and greater breadth of coverage than the other *Physical Review* journals; it also offers a rapid decision as to whether a paper will be accepted for peer review, as well as exceptionally close attention from its editors.

In the fall of the year, a joint Editorial and Journal Information Systems project integrated *Physical Review Focus*, which selects and explicates *Physical Review* and *PRL* papers for students and non-specialists, into *Physics*, the online publication that highlights a small number of the best papers that APS publishes. Both have flourished with the merger, with more visits in total to the unified site than either had before.

In the latter part of 2011, a search was conducted for a new senior Editor for *Physical Review B*. The founding editor of the journal, Peter Adams, will step down but remain on staff. Among several outstanding candidates who expressed interest in the position, the choice was Laurens Molenkamp of Universität Würzburg. Another founding editor, Robert Beichner of *Physical Review Special Topics: Physics Education Research*, will also step down; Charles Henderson of Western Michigan University will be his successor.

At year's end came the retirement of Robert Kelly, longtime Director of the Journal Information Systems (JIS) department. Mark Doyle, former Assistant Director, assumes leadership of the department.

Submissions to the journals seem to rise inexorably, but this year's uptick was a bit startling. An annual increase of from three to five percent is common, but this year submissions jumped by 6.6%, pointing up the need for more office space to accommodate additional full-time editors.



SCIENTIFIC MEETINGS

The annual March and April meetings were again very successful, both in terms of program content and attendance.

March Meeting The March Meeting, held in Dallas, Texas was the largest in its history. More than 8,000 people attended the program, with more than 7,500 papers being presented in invited, contributed and poster sessions. The total number of attendees included 3,245 students and more than 1,800 international attendees. Student activities and support continue to be offered and enhanced each year.

Several pre-meeting programs were held at the March Meeting including a DPOLY short course, and eight tutorials. There were also workshops, one on professional skills development for women physicists, a career workshop for students, an industrial workshop on careers in industry and government, and a research mentor training session. Special sessions were held during the meeting, including the Industrial Physics Forum on Industrial Applications of Superconductivity, a session on the History of Superconductivity, two Kavli Foundation Special Symposia, and a Nobel Prize Session with Konstantin Novoselov, who shared the 2010 Physics Prize with Andre Geim.

April Meeting The April Meeting, held in Anaheim, California, celebrated 100 Years of Sub-Atomic Physics. The program consisted of approximately 950 invited and contributed talks. The meeting had 1200 attendees, including approximately 330 students.

The April program included a special Kavli Foundation Plenary Session on 100 Years of Sub-Atomic Physics, and a lively evening session on Physics in Hollywood. As in previous years, Astronomy and Astrophysics were featured in numerous sessions. Several workshops were held including

one entitled “Improving Your Skills as a Research Mentor” and another on “Professional Skills Development for Women”. “Future Physicist Days” was a continued success, with its Graduate Student Career Panel and Networking Reception, and special undergraduate research sessions.

Unit Meetings Throughout 2011 there were many other scientific meetings sponsored by APS units, including the meetings of the Divisions of Nuclear Physics (DNP), Atomic, Molecular and Optical Physics (DAMOP), Fluid Dynamics (DFD), Plasma Physics (DPP), and Particles and Fields (DPF), as well as meetings sponsored by the Topical Groups on Shock Compression in Condensed Matter (GSCCM) and Hadronic Physics (GHP) and by a number of Sections.

PRIZES, AWARDS, FELLOWSHIPS

The Society honored numerous individuals with prizes and awards and elected a new class of APS Fellows.

At the March meeting, the Society presented 19 prizes and awards to a total of 26 individuals. At the April meeting, 15 prizes and awards went to 21 physicists. And 15 individuals were the recipients of 5 prizes and awards that were presented at meetings of divisions or topical groups throughout the year.

In addition, the Society elected a total of 238 new Fellows in 2011. Election to Fellowship represents recognition by one’s professional peers, and is highly competitive because no more than one-half of one percent of Society members can be elected to Fellowship in any given year.

In April, Council also approved a new dissertation award that will be presented biannually by the Topical Group on Hadronic Physics once the necessary endowment has been raised.



PUBLIC AFFAIRS

Marshaling its advocacy and media resources and working with other organizations, APS successfully countered congressional threats to science appropriations and secured legislative language based on the “Energy Critical Elements” study.

Until the November 2010 midterm elections, Democrats had controlled both Congressional chambers with large majorities, but they had decided to put fiscal year 2011 appropriations on hold until after the election. However, Republicans scored historic gains to recapture the House and substantially increase their influence in the Senate, so Democrats hastily passed a continuing resolution and left the budget in the hands of the new Congress that would assume office on Capitol Hill in January.

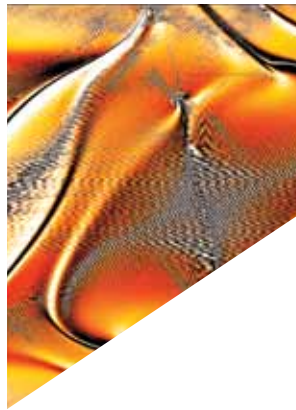
The APS Public Affairs Office convened a mid-December meeting of the society’s leadership to develop a strategy for the uncharted political waters. The planning meeting prepared APS to engage with other professional societies to test public attitudes toward science. Responding to a proposal from The Science Coalition — which represents the research and education interests of 45 major universities — APS joined 11 other partners to help underwrite a large-scale national poll. Preceded by four in-depth focus groups, the poll revealed a public that was favorably disposed toward science but unsure whether the societal benefits that flowed from it warranted the size of the federal government’s financial commitment to it.

To begin to address the public attitudes, APS, in collaboration with organizations representing high-tech industry, universities and national laboratories, broadened its Capitol

Hill and media work to provide a stronger focus on science’s societal benefits. The APS contribution included assisting the National User Facilities Organization with its exhibit on national laboratory research; illustrating the work of physics entrepreneurs at the Science Engineering Technology Working Group Congressional Visits Day reception; and helping to orchestrate an exceptionally well-received briefing for congressional staff on “Deconstructing the iPad.”

Throughout the challenging year, APS marshaled its advocacy resources to counter legislative threats to science appropriations, beginning with a bill in the House (H.R.1) that would have stripped away 20 percent of the DOE Office of Science’s budget in fiscal year 2011, and ending with fiscal year 2012 proposals that would have reduced support for NASA, NIST and NSF and defunded the James Webb Space Telescope (JWST). That science escaped the budgetary axe was due in no small measure to the collaborative lobbying of many organizations and the participation of many bench scientists in advocacy efforts. During calendar year 2011, APS members, alone, pressed the science case with almost 10,000 communications to members of Congress. The Office of Public Affairs reinforced the message through “Capitol Hill Quarterly” and the “Physics Frontline” blog.

Science funding was a prime public affairs concern for APS, but it was not the only one. During 2011, the APS Panel on Public Affairs released two reports, “Energy Critical Elements (ECE): Securing Materials for Emerging Technologies” (a joint project with the Materials Research Society) and “Direct Air Capture of CO₂ with Chemicals: A Technical Assessment.” Hill advocacy on the ECE study, which Robert Jaffe of MIT co-chaired, resulted in House and Senate bills that largely conform to the report’s recommendation and are expected to see legislative action in 2012. Based on a 2010 POPA study, APS submitted a petition to the Nuclear Regulatory Commission (NRC) that would require a company applying for a reprocessing or enrichment license to carry out a non-proliferation assessment. During the NRC public comment period the petition received support from members of Congress on both sides of the aisle and from experts on nuclear power, weapons and non-proliferation.



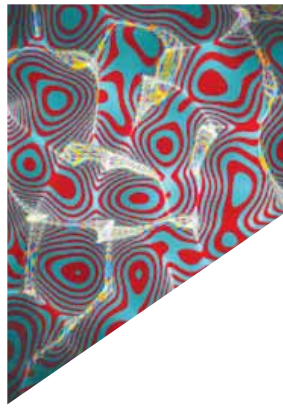
Finally, throughout 2011 the APS Office of Public Affairs actively engaged the media with unprecedented success to promote news coverage of Washington issues, compiling a long list of placements that included among others: (1) *The Wall Street Journal* and *Associated Press* coverage of a news conference held at the APS Ridge Office on opposition to proposed cuts to Brookhaven National Laboratory; (2) op-eds opposing H.R.1 appearing in *Politico* (Burton Richter) and the *San Jose Mercury News* (Andrew Larkowski); (3) Morton Kondracke's story in *Roll Call* on the devastating science impacts of H.R.1; (4) *The Washington Post*, *Time Magazine* and *The New York Times* reporting on the APS-MRS "Energy Critical Elements Study;" (5) news coverage in *USA Today* of House proposals to slash fiscal year 2012 science funding; (6) a front-page *New York Times* article reporting extensively on the APS NRC petition; (7) coverage of APS's JWST Executive Board Statement by MSNBC's blog, "Cosmos and Culture;" (8) *Black Hills Pioneer's* story on DUSEL; (9) *Bloomberg News*, *The Boston Globe*, *CBS Radio*, *The Washington Post*, *Scientific American*, *Physics Today*, *Nature* and *Science* reporting on what the debt reduction agreement could mean for science; (10) op-eds focusing on science and the Joint Select Committee on Deficit Reduction in *The Grand Rapids Press* (Vernon J. Ehlers) and Ohio's *Chillicothe Gazette* (John Mergo); (11) an editorial on science and the Select Committee by *The Republican* in western Massachusetts; (12) a *Global Security Newswire* story on the APS report, "Technical Steps to Support Nuclear Arsenal Downsizing."

E D U C A T I O N

The Physics Teacher Education Coalition (PhysTEC), APS's flagship education project, has spawned interest in creating a sister project at the American Chemical Society to address the shortage of chemistry teachers.

APS's flagship education project is the Physics Teacher Education Coalition (PhysTEC), which aims to improve and promote the education of future physics teachers. PhysTEC supports selected universities to develop their physics teacher preparation programs into national models, and has more than doubled the number of highly qualified physics teachers that graduate from these institutions. The project also works to disseminate best practices and research on teacher education, and to directly engage physics departments in teacher preparation. PhysTEC is a collaborative project with the American Association of Physics Teachers (AAPT) and is supported by a \$6.5 million award from the National Science Foundation (NSF) and contributions from APS members and private foundations.

In 2011, the project welcomed four new supported sites: Boston University; California State University, San Marcos; State University of New York, Geneseo; and Virginia Polytechnic Institute and State University. These new sites bring the total number of currently supported sites to eight; twelve previously supported sites have sustained significant project activities beyond the end of their funded periods. In Fall 2011, the project solicited a new round of proposals, and plans to support about six additional institutions starting in 2012. The American Chemical Society (ACS) launched an initiative to develop the Chemistry Teacher Education Coalition (CTEC), closely modeled after PhysTEC. APS is advising the new ACS effort, and is looking forward to a growing partnership that strengthens both efforts over time.



The broader coalition of PhysTEC member institutions grew to more than 250 members, and the project supported these universities and colleges through conferences, workshops, networking, and advocacy. The 2011 PhysTEC Conference was held jointly with the UTeach Institute in Austin, Texas, and attracted over 120 participants. The 2012 Conference will be held in Ontario, California, in conjunction with the AAPT Winter Meeting; a day-long meeting beforehand will bring together the University of California system and California State University system initiatives on science and math teacher education. The project also sponsored a third workshop on the University of Colorado's Learning Assistant program, which filled to capacity. Finally, the project produced the first published collection of peer-reviewed research papers on teacher education in physics. For more information on PhysTEC, see PhysTEC.org

Beyond PhysTEC, APS engages in a variety of activities to promote physics education at all levels (aps.org/programs/education). For faculty, a partnership with AAPT and the American Astronomical Society continues to offer New Faculty Workshops, which help faculty members who are beginning their teaching careers learn about their role as educators and manage their numerous professional responsibilities. The workshops reach about 40% of all new faculty in physics and astronomy, and are funded by NSF's Division of Undergraduate Education. In addition, Teachers Days at APS meetings provided professional development for teachers. APS also released a Physics Research Mentor Training guide to help physics researchers improve their mentoring skills and to improve the research experiences of the next generation of physicists.

INFORMING THE PUBLIC

APS Outreach continues to develop interesting and innovative programs for the public, while Media Relations places hundreds of items from APS journals and meetings into both traditional and new media outlets.

Public Outreach At its November 2010 meeting, the APS Council approved the formation of a new forum, the Forum on Outreach and Engaging the Public (FOEP). The FOEP was motivated by the need to increase the public's awareness of physics while also providing a "home" within APS for the large number of physicists currently involved in a diverse array of outreach and public engagement activities. FOEP recently held its first Executive Committee elections with close to 25% of the eligible membership voting, and will begin to organize for the 2013 March and April meetings.

For the third year in a row, the APS PhysicsQuest program was built around a comic book about laser superhero Spectra and her friends. In this edition, she battles Maxwell's Demon while teaching students about heat and thermodynamics. PhysicsQuest is a kit-based program for middle school students, which reaches over 13,000 classrooms each year. The comic book format has been very well received. To date over 2 million students have seen a PhysicsQuest kit. The program has grown so much in popularity that we are no longer able to advertise due to the overwhelming response. Currently there are over 500 people on a waiting list to receive kits.

APS again exhibited at the world's largest comic book convention, Comic-Con International in San Diego, CA. APS is the first professional society to exhibit at this kind

of event and because of the success of APS's initial appearance in 2010, it will continue to be a permanent part of the exhibit. Over 125,000 people attended the convention each day and the outreach team handed out over 1.5 tons of comic books. These received very positive reviews from several professional comic book reviewers as well as coverage in *Wired*, *IMDB* and several local newspapers.

The APS outreach website, PhysicsCentral, has continued to grow by leaps and bounds. In November 2010 the website was completely redesigned, and now has a whole new look and feel. Among the website features are podcasts, information on current physics research, experiments to do at home and an award winning blog, Physics Buzz. Physics Central hit a number of milestones, including a 51% increase in total visits and over one million page views in 2011. Podcast traffic has doubled in the last year and articles have been picked up by a number of popular sites. One blog post even received over 100,000 in two days.

In May, Six Flags America held a Physics Day for DC area students. APS outreach partnered with the Society of Physics Students (SPS) and the American Association of Physics Teachers to run many physics programs throughout the day, such as providing students with accelerometers and holding an egg drop contest.

This past year was the first year the outreach department awarded grants of up to \$10,000 to APS member wishing to start their own outreach programs. There were over 100 proposals and 6 grants were awarded. The funded programs ran the gamut from radio shows to a physics song parody contest. The program will continue in 2012.

Media Relations Media relations efforts at APS focus on increasing coverage of physics research in the popular media, and helping science journalists stay informed about the latest physics news. The APS Media Relations office fields inquiries and assists APS members and staff interacting with the media, in addition to alerting journalists to important physics news and policies. Vehicles for disseminating physics news include email alerts, embargoed press releases distributed through high quality press release distribution

services such as Eurekalert, the APS Physics News Ticker blog (a compilation of advance summaries of hundreds of APS journal papers for professional science journalists), and press releases announcing APS news originating from sources other than the Society's journals (Society statements, meeting news, etc.).

Although traditional media remain the primary source of news for most of the general public, blogs and other social media products are becoming increasingly important for the distribution of news in general, and science news in particular. The APS Media Relations office strives to make quality images, graphics, and sound files available to ensure that APS-related news is accessible and appealing for distribution through Facebook, Twitter, Tumblr and numerous social bookmarking services such as Reddit and StumbleUpon.

As in past years, APS journal articles continue to be the leading sources of physics news worldwide. Major news outlets cover 3-5 APS journal articles weekly, which led to more than 200 unique APS journal articles covered in thousands of news stories and feature articles in 2011 alone.

Stories originating from presentations at the APS annual March and April meetings are also major sources of physics news. APS meeting news is disseminated through APS-hosted pressrooms onsite at the annual meetings. In addition, virtual online pressrooms assembled for the annual meetings allow reporters to cover the news in the event that they are unable to attend in person. Media relations, press conferences, and press releases for the 2011 March meeting in Dallas, Texas directly resulted in the coverage of dozens of meeting presentations in over 300 print, online, radio, and television news stories.

Tracking of physics news in 2011 revealed that stories promoted through APS Media Relations efforts appeared in an extraordinary range of media including *The New York Times*, *the Associated Press*, *USA Today*, *BBC News*, *Wired Magazine*, *Fox News*, *the LA Times*, *the Washington Post*, *National Public Radio*, *MSNBC*, *ABC News*, *Nature News*, *Science Now*, *German Public Radio*, *National Geographic*, *the Lehrer News Hour*, and *The Economist*.



DIVERSITY

2011 was a critical year for the APS Minority Bridge Program, which aims to increase the number of underrepresented minorities who receive PhDs in physics.

Thanks to private donations, the Society has been able to continue its very successful Minority Scholarship Program for undergraduate physics majors. In 2011, 41 minority students received scholarships through this program. There continues to be a strong mentoring effort in this program with students receiving guidance from the Committee on Minorities, APS staff, and faculty at their institutions.

The Minority Bridge Program (www.minoritybridgeprogram.com) is an effort to increase, within a decade, the fraction of physics PhDs awarded to underrepresented minority (URM) students to the fraction that currently receive physics Bachelor's degrees, by creating sustainable research-focused transition programs (Bridge Experiences) and a national network of doctoral granting institutions to mentor students into and through PhD programs. The project incorporates strong evidence about support structures that predict academic success of URM students, and establishes links between Minority Serving Institutions (MSIs) and Doctoral Granting Institutions through research activities, collaboration, and personal contact.

In preparation for the program, APS staff continued visiting minority serving institutions, gave presentations, and met with both students and faculty at diverse institutions to hear about issues faced by students and faculty at MSIs. Presentations on diversity issues in higher education were organized at APS, AAPT, and other meetings. APS also launched a series of webinars specifically geared towards minority students in late 2011.

The Committee on the Status of Women in Physics held two NSF-funded workshops for post-doctoral associates and women scientists/faculty at the March and April meetings. A total of 72 women physicists worked in small groups with

professional facilitators to improve their communication and negotiation skills. APS received a continuing grant from NSF for this program and will provide these workshops for the next three years.

APS continued to provide childcare grants to early-career attendees of the March and April meetings to help defray extra childcare costs associated with attending the meeting. This year, 33 childcare grants were awarded, funded in part by a grant from the Elsevier Foundation. In addition to the March and April meetings, four APS divisions initiated childcare grants for their annual meetings. APS also awarded two Blewett Fellowships to women physicists in the early stages of their career. These fellowships enable women physicists, who have had to interrupt their careers, to resume their physics research.

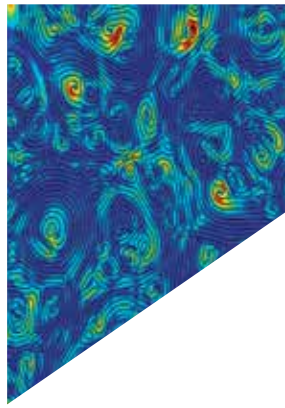
The Committee on the Status of Women in Physics began to offer "Conversations on Gender Equity," a new type of site visit to university physics departments and national laboratories. In March, a meeting of key participants was held to review the program and gauge its effectiveness, and develop a set of best practices for future participants.

CAREERS

APS held student events at meetings and hosted webinars about physics career paths, résumé preparation and interview skills.

The APS Committee on Careers and Professional Development (CCPD) finished work on the content and organization of the careers website (aps.org/careers), a major career resource for physicists. This work included adding a substantial collection of physicist profiles, a physics statistics page, and an updated interface with the APS Job Center.

APS also assumed the management of all on-site job fairs at its unit and annual meetings. The APS online job center (careers.aps.org) saw a steady number of new registered job seekers and



jobs posted, and used the additional revenue to improve career programs for members.

CCPD sponsors *Physics InSight*, a resource for students and faculty from middle school to college. This is a free hallway-display slideshow promoting physics education that reveals the human side of physics. *Physics InSight* continued to evolve in 2011 and now includes more physics employment statistics and information on APS scholarships and programs. The slideshow is updated several times each semester with new physicist profiles, research results, and physics career facts (aps.org/careers/insight).

APS continues to sponsor career fairs and workshops at APS national and divisional meetings to help members find jobs, and improve their resume and job interview skills. APS meetings included a mentor/student welcome reception which featured physics career information, career panels in which students spoke with physicists working in diverse areas (including science journalism, outreach, physics industry, and academic research), a career workshop focused on improving job search and interview skills, and an awards session in which winning oral and poster student presenters were recognized.

APS is collaborating with AAPT and the Society of Physics Students on a campaign to encourage high school students to take physics. APS published a brochure, “7 Myths About High School Physics” to provide information on physics careers, college admissions, and physicist salaries in English and Spanish. Offerings for undergraduate students included the Future of Physics Days at APS meetings, which provided a record number of 450 undergraduates with the opportunity to present research, network, and participate in a professional physics meeting.

In an effort to better engage undergraduate women in physics, APS staff and the Committee on the Status of Women in Physics initiated discussions with the national organizing committee of the 2012 Conferences for Undergraduate Women in Physics. This year, APS set up the main webpage for the conferences and provided giveaways to participants. A larger effort is already in the works for the 2013 conferences. APS launched a free webinar series aimed at providing education, research, and career information for graduate and undergraduate students. Past webinars can be viewed at aps.org/careers/guidance/webinars.

INTERNATIONAL AFFAIRS

The Society joined with international partners to serve physicists worldwide.

During 2011, the Society endeavored to better serve APS members living beyond US borders and to reach out to the international physics community. By establishing the International Friends of APS network, key contacts across the world served as the Society’s representatives at their institutions, helping to plan APS activities and communicate with members in their local communities. This past year, the International Friends used Activity Grants from the Society to host local activities in such diverse locations as Cartagena, Colombia; Jerusalem, Israel; Taipei City, Taiwan; Hsinchu City, Taiwan; Bangalore, India; and Warsaw, Poland.

The Society worked to better serve those members who cannot travel to APS meetings, especially those living outside of the United States (nearly 25% of the non-student members). At the April Meeting in Anaheim, APS conducted a trial of the usefulness and acceptance of online slide presentations by providing internet access to speakers’ slides from a broad cross-section of plenary, scientific and general-interest sessions. APS advertised the trial to physicists worldwide, including those who were not yet APS members. The result of an online survey of those who viewed the presentations indicated that they place great value on accessing APS meeting presentations online.

This past year, the APS partnered with the Sociedade Brasileira de Física (SBF) to issue a first call for proposals for a new exchange program for physics graduate students and professors. The Society also continues to partner with the Indo-US Science and Technology Forum (IUSSTF) to promote exchanges of graduate students and professors between the United States and India.

In partnership with the UK Institute of Physics (IoP) and the Abdus Salam International Centre for Theoretical Physics (ICTP), the Society co-sponsored a workshop in Cebu City, the



Philippines for physicists and engineers from developing countries who are interested in learning entrepreneurial skills. The event attracted 63 participants.

The Society partnered with the physical societies across North America for the Canadian-American-Mexican Physics Graduate Student Conference (CAM2011). The CAM conferences are bi-annual meetings jointly sponsored by the American Physical Society (APS), the Canadian Association of Physicists (CAP), and the Sociedad Mexicana de Física (SMF). They are organized by the students themselves, with mentorship from senior staff of the respective professional societies. Hosting the conference rotates among the 3 co-sponsoring countries, and in 2011 it was the turn of APS. The conference, held in Washington, DC, promoted international networking and career development for physics graduate students, encouraged collaborations among North America's young scientists, and exposed students to sub-disciplines of physics beyond their individual research. Hosting CAM2011 in the nation's capital provided a unique opportunity to highlight the links among science, diplomacy and public policy.

The SESAME Travel Award Program, the Society's joint program with the European Physical Society (EPS), the UK Institute of Physics (IoP), and the German Physical Society (DPG), endeavored to build scientific capacity in the Middle East. The SESAME project—the synchrotron light source near Amman, Jordan, brings together physicists from the Middle East, including several Arab countries, Israel and Iran, for international scientific collaboration.

The Society continues to bring international physicists to speak at APS meetings through both the Marshak and Beller Lectureships, which support distinguished physicists from the developed and developing countries respectively. In addition, twice this past year, the Society invited members of participating APS units to submit proposals for its International Travel Grant Award Program (ITGAP).

APS has continued its vigilance regarding important US Government policies that impact international scientific collaboration, for example, joining other scientific and higher education organizations to meet with State Department officials regarding new developments in visa processing.

M E M B E R S H I P

Membership soars above the 50,000 benchmark!

The official APS membership count hit 50,055. The largest increase over the last year was again seen in the student member category but for the first time since 2006, all member categories contributed to the overall growth. A majority of the new members in 2011 joined APS to be able to attend a Society meeting at the member rate. There were also increased promotions made by staff to target the different member segments and offer them the appropriate benefits and services based on the current stage of their career. With these retention efforts, the number of Student and Junior members both increased by 10%, continuing to provide a larger pool of those transitioning to full Regular membership. There continued to be a significant international cohort with just under 11,000 members, or 21%, from outside the US.

The number of APS Units grew again in 2011, and now stands at 42, with the addition of the Topical Group on Physics of Climate. APS Units provide another avenue for members to volunteer and get involved within the Society. The number of APS members who belong to at least one of the 14 Divisions, 12 Topical Groups, 7 Forums and 9 Sections is almost 32,000.

The “Friends of APS” program, started in 2000, currently has 238 participants worldwide. “Friends” are APS members who have agreed to help facilitate communication with current and potential members at their institution. Throughout the year, information is sent to them regarding membership, programs, and benefits to be shared with colleagues and students. The “Friends” program has proven to be a useful tool in both retaining and attracting APS members.



FINANCES

December 31, 2011

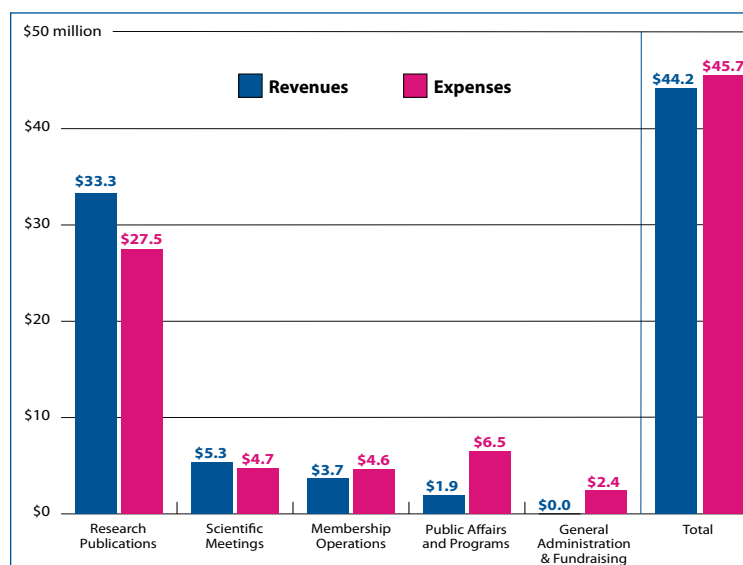
During fiscal year 2011, the total assets of the American Physical Society decreased from \$135.4M to \$134.2M, while the Society's liabilities increased to \$35.5M from \$34.6M the previous year.

The tables and charts in this section summarize the financial operations of the Society as of December 31, 2011. The table headed Statement of Financial Position shows the final financial position of the Society for 2011 and 2010. The table headed Statement of Activities shows the financial activities of the various components of the Society for the 2011 and 2010 fiscal years. The distribution of operating revenues and expenses across the components of the Society is also displayed graphically in the accompanying figures. Certain amounts reported in the prior year have been reclassified to conform to the current year presentation.

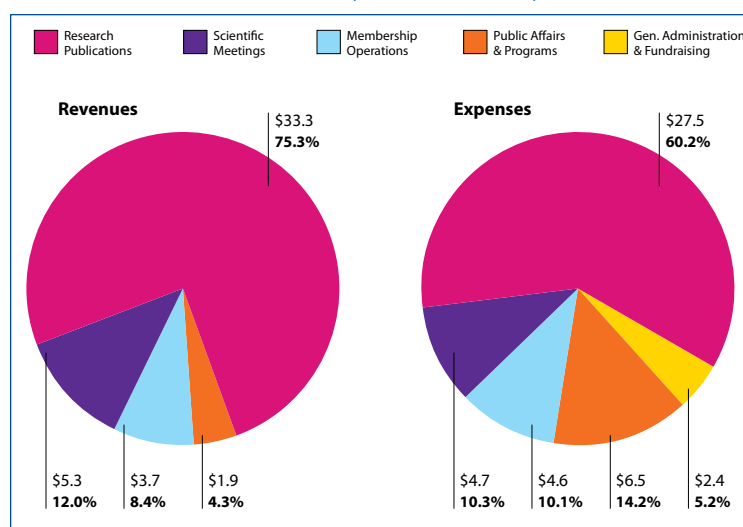
Net assets at the end of fiscal year 2011 were \$98.7M, compared with \$100.7M at the end of 2010. These include \$11.3M in restricted net assets, which are funds for prizes and awards and for the programs of the current capital campaign. The restricted net assets increased slightly from \$11.2M at the end of 2010. The unrestricted net assets include the Society's operating accounts (cash and cash equivalents), totaling \$12.5M at the end of 2011, and its investments in equities and fixed-income issues. These investments were \$107.0M at both 12/31/11 and 12/31/10.

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 \$MILLIONS)

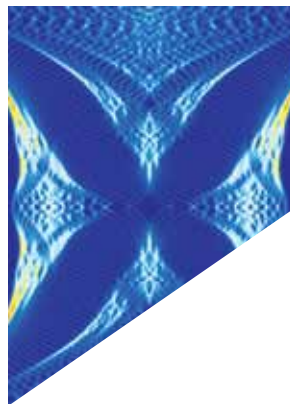


STATEMENT OF ACTIVITIES (IN \$MILLIONS)



FINANCIAL POSITION

December 31, 2011 and 2010



	2011	2010
ASSETS		
Cash and cash equivalents	\$ 12,475,498	\$ 15,425,705
Investments, at fair value	106,996,767	106,992,611
Accounts receivable:		
American Institute of Physics	4,033,607	3,988,089
Other, net of allowance for doubtful accounts of \$24,000 and \$24,000 in 2011 and 2010, respectively	575,495	678,768
Pledges receivable, net	155,668	196,866
Prepaid expenses and other assets	1,327,490	981,716
Equity interest in American Center for Physics	2,137,191	1,782,151
Land, building and equipment, net	6,002,775	4,845,561
Beneficial interest in perpetual trust	484,141	485,889
Total assets	\$134,188,632	\$ 135,377,356
LIABILITIES AND NET ASSETS		
Liabilities:		
Accounts payable and accrued expenses	\$ 3,201,879	\$ 3,047,033
Deferred revenues:		
Publications	14,470,814	15,581,754
Membership dues	2,887,127	2,769,380
Other	320,982	89,755
Liability for post-retirement medical benefits	14,607,200	13,140,809
Total liabilities	35,488,002	34,628,731
Commitments and contingencies		
Net assets:		
Unrestricted	87,401,693	89,553,678
Temporarily restricted	9,115,373	9,018,821
Permanently restricted	2,183,564	2,176,126
Total net assets	98,700,630	100,748,625
Total liabilities and net assets	\$134,188,632	\$ 135,377,356

STATEMENT OF ACTIVITIES

December 31, 2011 and 2010

	2011	2010
CHANGE IN UNRESTRICTED NET ASSETS		
Revenues		
Research publications	\$ 33,288,150	\$ 32,995,144
Scientific meetings	5,251,370	4,329,109
Membership operations	3,716,558	3,553,441
Public affairs and programs	1,249,332	1,502,175
Net assets released from restrictions	669,625	904,448
	44,175,035	43,284,317
Expenses		
Program services		
Research publications	27,462,504	28,098,375
Scientific meetings	4,666,447	3,932,751
Membership operations	4,638,004	4,209,163
Public affairs and programs	5,820,785	6,081,402
Prizes and related costs	669,625	904,448
Total program services	43,257,365	43,226,139
Supporting services		
Fundraising	523,201	498,681
General and administrative	1,879,166	1,804,367
Total supporting services	2,402,367	2,303,048
Total expenses	45,659,732	45,529,187
Loss from operations	(1,484,697)	(2,244,870)
Non-operating activities		
Income from investments	1,894,861	1,614,069
Net unrealized (loss) gain on investments	(3,325,899)	9,669,418
Net realized gain (loss) on investments	882,862	(984,534)
Equity interest in American Center for Physics	355,040	90,591
Change in post-retirement medical benefits other than net periodic postretirement medical benefit cost	(474,152)	(383,940)
	(667,288)	10,005,604
Change in unrestricted net assets	(2,151,985)	7,760,734
CHANGE IN TEMPORARILY RESTRICTED NET ASSETS		
Contributions	189,942	135,901
Income from investments	576,235	577,590
Net assets released from restrictions	(669,625)	(904,448)
Change in temporarily restricted net assets	96,552	(190,957)
CHANGE IN PERMANENTLY RESTRICTED NET ASSETS		
Contributions	9,186	6,713
Loss (gain) on beneficial interest in perpetual trust	(1,748)	25,528
Change in permanently restricted net assets	7,438	32,241
Change in net assets	\$ (2,047,995)	\$ 7,602,018

2011 CONTRIBUTIONS AND GIFTS

APS is grateful for contributions from corporations, governmental agencies, national and international labs, foundations and individuals that make possible the activities and programs of the Society.

During 2011 the Development Department provided fund raising support for a \$200,000 campaign by the Forum on the History of Physics (FHP) for their Physics Heritage Fund. The department also secured funds for a new award, The J. J & Noriko Sakurai Dissertation Award for exceptional young scientists in theoretical particle physics. The Development Department has been working with APS Unit leadership to help secure long term financial stability for underfunded Prizes and Awards through fund raising campaigns or one time transfers of unit funds.

Planned giving to the Society was promoted in 2011 through estate planning sessions at the March and April annual meetings in Dallas and Anaheim. Fellow receptions, to recognize APS Fellows and share with them information about APS programs and initiatives, were held in Pasadena, Philadelphia, and Santa Fe during 2011. Annual giving from APS members continues to provide key support to the Society's education and diversity, public affairs, international and public outreach programs. APS is especially grateful to those donors whose support of APS extends across many years.

We are pleased to provide special recognition to those contributing \$100 or more in 2011 by listing their names here.

Corporations

Anonymous (1)
AT&T
Alcatel-Lucent Technologies Bell Labs
CVI Melles Griot Corporation
Dow Chemical Company
Elsevier Science:
 Polymer
 Solid State Communications
Elsevier Science Ltd
Energy Conversion Devices, Inc.
GE Global Research
GE R&D Center
General Atomics
General Electric Company
General Motors Corporation
Herbert V. Friedman, Inc.
IBM Corporation
Keithley Instruments, Inc.
Lighthouse Photonics, Inc.
NEC Corporation
Thorlabs, Inc
Verizon (formerly GTE)
Vernier Software
WebAssign
Wyatt Technology Corporation
Xerox Corporation

Governmental agencies & other organizations

Brookhaven Science Associates
Department of Energy (DOE)
Journal of Chemical Physics, AIP
Massachusetts Institute of Technology
National Science Foundation (NSF)
Open Society Institute
Physics of Fluids, AIP
Southeastern Universities Research Association (SURA)
Stanford University
Universities Research Association (URA)
Yale University

Foundations

Applied Materials Foundation
Alfred P. Sloan Foundation
David & Lucile Packard Foundation
East Bay Community Foundation
Energy Foundation
GE Foundation
Heineman Foundation
John D. & Catherine T. MacArthur Foundation
Kavli Foundation
Research Corporation for Science Advancement
Richard Lounsbery Foundation
UCLA Foundation
University of Iowa Foundation

National & international laboratories

Argonne National Laboratory
Brookhaven National Laboratory
CNRS-IN2P3
Cockcroft Institute
Cornell University-Laboratory for Elementary Particle Physics (LEPP)
Deutsches Elektronen-Synchrotron (DESY)
European Organization for Nuclear Research (CERN)
Fermilab National Accelerator Laboratory
Gesellschaft für Schwerionenforschung mbg (GSI)
INFN-Laboratori Nazionali di Frascati
KEK High Energy Accelerator Research Organization
Lawrence Berkeley National Laboratory
Lawrence Livermore National Laboratory
National Superconducting Cyclotron Lab at Michigan State University (NSCL)
Oak Ridge National Laboratory
Paul Scherrer Institut (PSI)
Sandia National Laboratories
Stanford Linear Accelerator Center (SLAC)
The John Adams Institute for Accelerator Science
Thomas Jefferson National Accelerator Facility
TRIUMF

Prize, award, and other endowment by individuals

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

**Individuals who
contributed \$15,000+**

William Brinkman
Kenton Brown
Robin Dibner
Aleksandar Svager

**Individuals who
contributed
\$5,000-\$14,999**

John Deneufville
Robert Dynes
Herbert Friedman
Kenneth Friedman
Neal Lane
Cherry Murray

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

Anonymous (2)
Fred Blum
Martin Blume
Benjamin Chao
James Drake
Judy & Frank Franz
Hans Frauenfelder
Robert Griffiths
W. Hassinger
Chienwen Hsu
Henry Kapteyn
Kate Kirby
Jacob Klein
Miles Klein
James Langer
Siu-Au Lee
Chun Lin
Robert Lourie
Ernest Moniz
Larry Norris
Frederick Raab
Robert Rediker
John Risley
Joseph Serene
Gene Sprouse
Virginia Trimble
Timothy Trucano
Daniel Tsui
Michael Turner
Philip Wyatt

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

Elizabeth Beise
J. Birman
Antony Chang
Donald Curran
Jacques Destry
Roger Dixon
Carl Gagliardi
Mark Glauser
Allen Goldman
Alfred Goshaw
Roderick Grant
Beverly Hartline
Bernard Hildebrand
J. King
Leonard Kisslinger
Alan Krisch
Gabrielle Long
Akiyasu Makishima
Joseph Mantil
Lillian C. McDermott
Gregory Meisner
Horst Meyer

Ichiro Miyagawa
Margaret Murnane
John Preskill
Burton Richter
Rudy Ruggles
Juerg Saladin
Francesca Sammarruca
James Scofield
Charles Sommerfield
Donna Stokes
Alvin Tollestrup
Carl Wieman
Bruno Zumino

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

Anonymous (1)
Vamsi Akkineni
Renate Albat
Marco Ameduri
Frank Avignone
Christina Back
David Balamuth
Norman Barnett
Ali Belkacem
Otto Bergmann
Alberto Berzolari
Eric Braaten
Alan Breakstone
Frank Bridges
Spencer Buckner
David Cassel
Carlton Caves
Sudip Chakravarty
Jagdish Chandar
Morrel Cohen
Jack Colwell
James Cox
Janis Dote
Loyal Durand
Philippe Eberhard
Lewis Edelheit
Estia Eichten
Robert Eisenstein
Celia Elliott
Guy Emery
James Faulkner
Robert Field
Zachary Fisk
Kenneth Ford
James Fry
Mary Gaillard
Edward Gardner
Timothy Gay
Ronald Gilman
Jonathan Gittleman
Larry Gladney
Bernard Gottschalk
Christopher Gould
Harvey Gould
R. Greene
H. Griem
Lee Grodzins
Richard Haglund
Robert Haight
Bertrand Halperin
Marianne Hamm
Robert Hamm
Philip & Donna Hammer
Luisa Hansen
Ryusuke Hasegawa
Warren Heckrotte
Roger Hess
Jonathan Hoffman
Roy Holt
John Holzrichter
Timothy Houck

Samson Jenekhe
Michael Jones
Bobby Junker
Tetsuo Kaneko
Lewis Keller
Kirby Kemper
J. Kendall
T. Kinoshita
P. Lambropoulos
Anthony Leggett
D. R. Lehman
Roy Leigh
Cecil Leith
Thomas Lemberger
Robert Lempert
Anthony Leonard
Harry Letaw
David Liberman
Ming-Kung Liou
Michael Lubell
James MacLachlan
Richard Martin
Philip Martzen
Frank McDonald
D. McWhan
Richard Meserve
Dan Miller
Frederick Mills
Michael Moldover
Jagadeesh Moodera
Steven Moss
Theodore Moustakas
Mark Nagumo
Bogdan Nedelkoff
Philip Nielsen
Wayne Niemuth
Douglas Osheroff
Alan Palevsky
John Peoples
Udo Pernisz
Michael Peskin
Steven Pieper
Lawrence Price
Robert Reasenber
Edward Redish
Don Reeder
John Rees
Mindla Rosen
Carl Rosenfeld
Lawrence Rubin
Myriam Sarachik
Stephen Schiff
Roy Schwitters
Andrew Sessler
Peter Shaffer
Paul Shepard
Charles Sinclair
Andris Skuja
Farren Smith
Joshua Socolar
Gerard Stephenson
Edward C. Stone
Truman Storvick
James Strait
R. Strombotne
David Strozzi
G. Taggart
John Tanner
Doris Teplitz
D. R. Thouless
Alexander Weintraub
Ulrich Welp
David Wineland
Robert Wiringa
Bruce Worster
N. Wyeth
Dave Youngblood
Bing Zhou

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

Anonymous (10)
Neal Abraham
Ali AbuTaha
Andreas Acrivos
Frank Adams
Stephen Adler
Lewis Agnew
Glenn Agnolet
Daniel Akerib
Lawrence Akers
Noriko Akutsu
Carl Albright
Ralph Alexander
Moorad Alexanian
Jonathan Allen
Margaret Alston-Garnjost
Orlando Alvarez
James Ambrose
Ole Andersen
Ansel Anderson
Charles Anderson
Gordon Anderson
Roger Anderson
Weston Anderson
Heather Andrews
W. Lester Andrews
Konrad Aniol
Brian Annis
John Apruzese
Michael Arenton
Joseph Argento
David Armstrong
Samuel Aronson
John Arrington
Kichizo Asai
David Aston
Daniel Auerbach
Richard Averitt
Wesley Ayres
Andrew Bacher
Samuel Bader
Dionys Baeriswyl
Brian Bagley
Coral Baglin
John E. Baglin
Samuel Baker
John Balbach
Samuel Baldwin
James Ball
Alexis Baratoff
Troy Barbee
William Bardeen
Lynn Barker
Daniel Barnes
Lawrence Bartell
Donald Barton
Donald Batchelor
Laura Bautz
Kyle Bayes
Bret Beck
Donald Beck
Ulrich Becker
Kevin Bedell
J. Bednorz
James Beene
Nicholas Begovich
Eugene Beier
Norman Belecki
Roy Benedek
Richard Benjamin
A. Beretvas
Beverly Berger
James Bergquist
Herbert Berk
Mark Berndtson
Henry Berry

Lee Berry
R. Berry
Frances Berting
M. Bhat
Sabyasachi Bhattacharya
John Bieber
Arthur Bienenstock
Ikaros Bigi
George Bing
Robert Birkmire
George Bissinger
James Bjorken
Roger Blais
Julio Blanco
Martin Block
Craig Blocker
Arnold Bloom
David Bodansky
Gregory Boebinger
Richard Boggy
Peter Bond
Massimo Boninsegni
Corwin Booth
Frederick Borcharding
Randy Bos
Theodore Bowen
Walton Boyer
Aleksander Braginski
Alan Brailsford
Helmut Brand
Charles Brau
James Brau
Martin Breidenbach
Manuel Bretscher
David Brice
Stanley Brodsky
John Bronzan
George Brown
Hugh Brown
Robert J. Brown
John Browne
Richard Bukrey
W. Bullis
Bruce Bunker
Eric Butcher
Yunhai Cai
Federico Capasso
Roberto Car
Corrado Cardarelli
Lawrence Cardman
J. Carlson
John Carlstrom
Thomas Carlstrom
John Carrico
Allen Carroll
James Castiglione
Peter Celliers
Pei Chan
Vincent Chan
Colston Chandler
Premala Chandra
David Chang
Lay Nam Chang
Chellis Chasman
Shirley Chiang
Chia-Ling Chien
Leo M. Chirovsky
Alan Chodos
Edward Chupp
A. Chynoweth
John Clark
W. Clark
Jim Clemans
James Clendenin
Thomas Coan
George Cody
C. Coffin
Lawrence Coleman
Mark Coles

Stirling Colgate
Lee Collins
Reuben Collins
William Collins
Lynn Cominsky
John Connell
Esther Conwell
David Cook
Benjamin Cooper
Pierce Corden
Charles Cornwell
Donald Correll
Francis Correll
George Coulter
Ernest Courant
Robert Cousins
David Crandall
Michael Creutz
Louis Creveling
Roger Crouch
Paul Crowell
James Cumming
Steven Cundiff
David Cutts
Peter Cziffra
Orin Dahl
James Danielson
Teymour Darkhosh
Timothy Darling
Anne Davenport
Paul Davey
Cary Davids
James Davis
L. Davis
Richard Davis
William Davis
Senarath De Alwis
Paul De Carli
Pablo Debenedetti
Daniel Decker
James Degnan
Walt Deheer
Marie-Agnes Deleplanque-
Stephens
Genevieve Delmas Patterson
Jacques Denavit
Alan Desilva
Paul Dickson
Duane Dicus
Robert Diebold
Michael Dine
Mihaela Dinu
H. Dixon
Lance Dixon
J. Doane
Jack Dodd
Heinz-Dietrich Doebner
Ruth Doherty
John Domingo
Sidney Drell
Howard Drew
Adam Drobot
Donald Dubois
Charles Dunn
Thomas Dunning
B. Durand
Thomas Eck
Robert Ecke
Stanley Ecklund
David Ederer
Ariel Edery
Dean Edmonds
Alan Edwards
Donald Edwards
Helen Edwards
Robert Edwards
Theodore Einstein
Elmer Eisner

Robert Elgin
Tommy Elioff
Stephen Ellis
Richard Elrick
Robert Ely
Ronald Enstrom
Kenneth Epstein
Dennis Erickson
Glen Erickson
Robert Euwema
William Evenson
Viktor Evtuhov
Edward Eyler
Joel Fajans
L. Farrow
Michael Fayer
Leonard Feldman
Paul Felsher
David Fenner
Stephen Ferguson
Thomas Ferguson
John Ferron
Alexander Fetter
Mark Feuer
Alexander Firestone
David Fischbach
George Fisk
William Fogle
Guy Fogleman
Raymond Folse
Jerry Forbes
Lawrence Ford
E. Fortson
W. Fowler
Eduardo Fradkin
William Frazer
Robert Friauf
Stephan Friedrich
Joshua Frieman
Klaus Fritsch
Lothar Fritsche
Kyue Fukuda
Eiichi Fukushima
Jose Fulco
Wendy Fuller-Mora
Robert Furber
Richard Furnstahl
John Galayda
Gregg Gallatin
J. Garcia
L. Garcia-Colin
Richard Garner
Samuel Gasster
Judith Gates
Clayton Gearhart
Daniel Gee
Donald Geesaman
Peter Gehring
Walter Gekelman
Eugene Gellert
Graciela Gelmini
Milton Genser
Edward Gerjuoy
Bernd Gerlach
Joseph Giaime
Bruce Gibbard
Lawrence Gibbons
George Gidal
Sarah Gilbert
Stephen Gill
P. Gillette
Forrest Gilmore
Marshall Ginter
George Ginther
Joseph Giordmaine
Charles Glashausser
Alexander Glass
George Glass

James Glazier
Sharon Glendinning
Maurice Glicksman
Henry Glyde
Robert Goddard
Brendan Godfrey
Robert Godwin
Howard Goldberg
J. Goldberg
Michael Golde
Raymond Goldstein
Jeffrey Goldstone
E. Goldwasser
Jerry Gollub
Bernard Goodman
Timothy Goodman
Dave Goss
Harvey Gould
Tsahi Gozani
Mark Gray
Elias Greenbaum
Daniel Greenberger
Laura Greene
Henry Greenside
Brooke Gregory
Gary Grest
D. Grether
D. Grischkowsky
James Grochocinski
Donald Groom
Robert Gross
Gaston Gutierrez
Irving Haber
Willy Haerberli
Roger Hagenruber
Sharon Hagopian
Vasken Hagopian
Gerhard Hahne
Frederick D. Haldane
Barbara Hale
John Hall
Maclin Hall
Robert Hall
D. Hamlin
Gregory Hammett
Jonathan Hardis
W. Harker
Marguerite Harning
Alexander Harris
Frederick Harris
Richard Harris
Michael Harrison
Charles Hartwig
Everett Harvey
Douglas Hasell
Gerwin Hassink
Edward Haugland
Jack Haugsnes
Charles Hawkins
William Hawkins
Shun-Ichiro Hayakawa
Mr. Hayasaka
Andrew Hazi
Steve Heald
Alan Heeger
Leon Heller
Philip Hemmig
Girardeau Henderson
Steve Herb
Dean Herr
John Herrera
Cal Herrmann
Daryl Hess
Michael Hibbs
Takekoshi Hidekuni
John Hill
Gene Hilton
David Hobill

M. Hockaday
Allan Hoffman
James Hoffman
Nelson Hoffman
Carlos Hojvat
R. Holland
Richard Holmes
Natalie A. Holzwarth
Daniel Hone
Gerard Honore
Richard Howard
Ruth Howes
Alan Howsmon
Gilbert Hoy
Klaus Huber
David Hudson
Gerald Huffman
Russell Hulse
Rusty Humphrey
William Humphrey
Richard Hundley
Winifred Huo
James Hurt
Mark Hybertsen
Jay Hyman
Hiroshi Ichise
David Ignat
Kenji Iijima
Gerhard Ingold
Erich Ippen
Ralph Isler
H. Jackson
J. Jackson
W. Jackson
William Jacobs
Bernardo Juduszliwer
Robert Jaffe
Kenneth Janda
W. Janos
Terrence Jensen
Thomas Jernigan
Jeffrey Jewett
Brant Johnson
Rolland Johnson
David Johnston
H. Johnston
J. Jonas
Keith Jones
Kevin Jones
Robert Jones
Thomas Jones
G. Joyce
Robert Kaeser
Hiroshi Kamimura
John Kane
Harvey Kaplan
David Karraker
Tomokazu Kato
Richard Kautz
Boris Kayser
Spurgeon Keeny
Leonid Keldysh
William Keller
Michael Kelley
Henry Kelly
Donald Kerr
Stephen Kevan
N. Khuri
Dae Kim
Y. Kim
Yong Kim
Charles King
Paul King
O. Kistner
Akio Kitsunezaki
Alfred Kleinhammes
John Klepeis
William Klink

James Knauer
Stephen Knox
James Knudson
H. Koch
Shigeru Koikegami
Charles Kolb
Noemie Koller
Seiki Komiya
Rikio Konno
Alexander Konstantinov
Frederick Kontur
Victor Korenman
Jan Korringa
James Krebs
Herbert Kroemer
Andreas Kronfeld
Mark Kryder
Kuniharu Kubodera
Moyses Kuchnir
Helmut Kuehl
Christian Kurtsiefer
Klaus Lackner
Vasudevan Lakshminaray-
anan
Frederick Lamb
David Land
Gerard Lander
Harry Landon
Robert Lanou
Richard Lanza
Louis Lanzerotti
John Larabee
Bennett Larson
James Larson
John Lawrence
R. Lawrence
Donald Lazarus
Albert Lazzarini
Harry Lebovic
David Lee
Tsung-Shung Lee
Warren Legler
Dietrich Leibfried
Frieder Lenz
Jeffrey Lerner
Jacques Leveille
Judah Levine
Zvie Liberman
Peter Limon
Li-Jen Lin
Erick Lindman
Rulon Linford
Karen Lingel
Laurence Littenberg
Marvin Litvak
Lynda LoDestro
David Look
Richard Loveless
Zheng-Tian Lu
Peter Lucas
Mark Lundstrom
Sergei Lusin
Vera Luth
John Luthé
David Lynch
Rosemary MacDonald
Douglas MacLaughlin
Albert Macrander
William Magee
Charles Maguire
S. Mahanti
Yousef Makdisi
Ernest Malamud
Stanley Mandelstam
Robert Markiewicz
Diane Markoff
David Markowitz
Alan Marshall
Thomas Marshall

Ronald Martin
Walter Massey
C. Mate
John Mather
Wesley Mathews
Shiro Matsuoka
M. Keith Matzen
Robert Maurer
Michael May
John McCarthy
Robert McCarthy
Kevin McCarty
Ronald McFee
Stephen McGuire
Chris McKee
Robert McKibben
Hugh McManus
Thomas Mcnab
Dennis McNabb
Laurie McNeil
Thomas Mehlhorn
Robert Meier
Paul H. Meijer
Matthew Meineke
Anton Menth
Robert Mercer
Eugen Merzbacher
Sydney Meshkov
Harold Metcalf
Werner Metz
Curtis Meyer
Fred Meyer
Jerry Meyer
Stanislav Miasnikov
Richard Milburn
G. Miller
John Missimer
John Mitchell
George Mitev
W. Moeckel
Kenneth Moeffit
David Moir
Stephen Montgomery
Kuk Moon
F. Mooring
Charles Morehouse
Larry Morford
Robert Morris
David Morrow
Steven Moszkowski
Toshio Motoba
Alfred Msezane
George Mueller
Paul Mueller
Gregory Mulhollan
Joe Mullins
Donald Murphy
Mohammed Mustafa
Yoichiro Nambu
Sumita Nandi
Yoshimasa Narahara
Albert Narath
Joseph Natowitz
George Neilson
Harry Nelson
Ron Nelson
David Newell
David Newman
Kathie Newman
Won-Keng Ng
Paul Nordin
Eric Norman
John O'Brien
John O'Fallon
Hidetoshi Okada
Koji Okano
Angela Olinto
Robert Olness
Tore Olsen

Grant O'Rielly
Robert Orr
Peter Ostermann
Neil Ottenstein
Alfred Owyang
Satoshi Ozaki
David Pace
Lyman Page
Andrea Pagliarin
Ci-Ling Pan
Victor Pare
Robert Park
Eugene Parker
William Parker
Richard Partridge
C. Kumar Patel
Ritchie Patterson
Jerry Peacher
Roberto Peccei
Mark Pederson
Arnold Perlmutter
Murray Peshkin
Wayne Pfeiffer
Ronald Phaneuf
Arthur Phelps
David Phillips
James Phillips
Julia Phillips
Jorge Piekarewicz
Jose Piffaretti
David Pipkorn
David Piston
Michael Plesniak
Joseph Polchinski
Richard Post
John Poucher
William Press
Dean Preston
Richard Price
Morris Pripstein
Philip Pritchett
Robert Prohaska
Derek Pursey
Kedar Pyatt
Chris Quigg
Brian Quinn
Robert Rader
Pramila Raghavan
David Rahm
Krishna Rajagopal
Anant Ramdas
Lynwood Randolph
P. Rao
R. Rau
Richard Rauch
Robert Ray
John Raymond
Glen Rebka
Richard Redington
Sidney Redner
Robert Redwine
Leonard Reiffel
William Reinhardt
Howard Reiss
Robert Resnick
Glenn Reynolds
Peter Reynolds
James Rhyne
Aurino Ribeiro Filho
David Rice
Edward Richley
Matthew Richter
Steven Riedhauser
Daniel Riley
Mark Riley
Pat Roach
R. G. Robertson
Lawrence Robins

Gene Rochlin
Vincent Rodgers
Steven Rolston
James Rome
John Romero
Kenneth Rose
Peter Rose
Bruce Rosenblum
Martin Rosenblum
Jonathan Rosner
Norman Rostoker
Richard Rowberg
J. Rowe
Morton Rubin
Randal Ruchti
Dmitri Ryutov
Hans Sachse
Richard Saenz
Viraht Sahni
Makoto Saito
Mitsuo Sakai
Gerhard Salinger
Alberto F Santoro
Wayne Saslow
Ken Sato
Douglas Scalapino
Richard Scalettar
Michael Schaffer
Heidi Schellman
John Schiffer
Dietrich Schinzel
Eric Schlegel
Stefan Schmidt
Roland Schmitt
John Schroeder
Lee Schroeder
Jonas Schultz
Michael Schulz
Richard Sciambi
Hugh Scott
J. Scott
Benjamin Segall
Wolf Seka
Raymond Seraydarian
Raymond Serway
Robert Shalek
Lu Sham
Wei Shan
Marleigh Sheaff
Stephen Shenker
Rubby Sherr
Bruce Sherwood
Howard Shields
Fujio Shimizu
Michael Shlesinger
Howard Shugart
Edward Siciliano
Manfred Sigrist
Arnold Silver
Elizabeth Simmons
Pekka Sinervo
Shobha Singh
Andrew Skumanich
Charles Slichter
R. Slusher
Donald Smith
George Smith
Harold Smith
James Smith
Roger Smith
Steven Smith
Todd Smith
Winthrop Smith
Dale Snider
Paul So
George Soli
James Sowinski
Harold Spinka

Joel Spira
Richard Squire
Stephen St John
Frieda Stahl
Anthony Starace
Stephen Steadman
E. Otto Steinborn
Richard Steiner
Frank Steldt
Frank Stephens
George Sterman
David Stern
Frank Stern
Morton Sternheim
Gordon Stewart
Melbourne Stewart
Howard Stidham
Michael Stitelman
Ian Stockdale
Rogers Stolen
Edward Strait
Alan Strauss
J. Streetman
Wolfgang Sturhahn
Robert Sugar
Evan Sugarbaker
Harry Suhl
Gerrit Sutherland
Richard Sutherland
Paul Sutton
Jean Swank
Eric Swanson
Robert Swanson
Paul Swartz
James Sweet
Harry Swinney
Abraham Szoke
Hideaki Takayanagi
Morris Tanenbaum
David Tanner
Theodore Tarbell
Bruce Tarter
Haskell Taub
Uwe Tauber
Edward Taylor
James Taylor
Vigdor Teplitz
Jerry Tersoff
Philip Thacher
Peter Thieberger
Friedrich Thielemann
David Tilley
Murray Tobak
Frank Tobin
Roger Tobin
E. Terry Tomboulis
Mitsuyoshi Tomiya
Carl Tomizuka
Philip Tomlinson
John Tranquada
George Trigg
George Trilling
Thomas Trippe
Basil Tripsas
Alvin Trivelpiece
Adam Trombly
Frank Turkot
Robert Turner
Robert Tycko
Henry Tye
Allan Tylka
John Ullmann
Sergio Ulloa
Karl Van Bibber
Jean-Francois Van Huele
Thomas Van Velchten
John Vander Velde
David Vanderbilt

James Vary
John Venables
F. Vestner
Flemming Videbaek
David Vier
Harold Vinegar
Ramona Vogt
Silvia Volker
Thomas Von Foerster
Tycho Von Rosenvinge
Richard Wachnik
C. Waddington
Sigurd Wagner
Walter Wales
Kameshwar Wali
James Walker
Ronald Walton
Bennie Franklin Ward
W. Warren
Edel Wasserman
Keiji Watanabe
Richard Webb
Robert Webb
Alfons Weber
Medford Webster
Xiangdong Wei
Matthew Weidmann
Michael Weinert
Harold Weitzner
Jasper Welch
David Wensky
Richard Werbeck
Frank Werner
Alan Wetmore
John Wheeler
Stanley Whittcomb
Herman White
John White
Marion White
William Whitney
Edward Whittaker
Herman Wieder
Donald Wiegand
Howard Wieman
Philip Wigen
Jeffrey Willis
Brenda Winnewisser
Manfred Winnewisser
Dan Winske
Thomas Winter
Stanley Wojcicki
Stephen Wolbers
Emil Wolf
Raymond Wolfe
Henry Wong
Margaret W. Wong
John Wood
Harry Woodcock
Michael Wortis
Byron Wright
Edward Wright
Ying Wu
Ryuji Yamada
Robert Yamartino
Yin Yeh
Sigfrid Yngvesson
Ellen Yorke
Shozo Yoshizumi
Donald Young
Linda Young
Hyuk Yu
Peter Yu
William Zajc
Richard Zare
Michael Zeller
George Zimmerman
William Zimmermann
J. Zink
Paul Zitzewitz

2011 APS OFFICERS

PRESIDENT	PRESIDENT-ELECT
Barry C. Barish	Robert L. Byer
California Institute of Technology	Stanford University

VICE PRESIDENT	PAST PRESIDENT
Michael S. Turner	Curtis Callan, Jr.
The University of Chicago	Princeton University

EXECUTIVE OFFICER	TREASURER/PUBLISHER	EDITOR-IN-CHIEF
Kate Kirby	Joseph W. Serene	Gene Sprouse
Harvard-Smithsonian Center for Astrophysics (retired)	Georgetown University (emeritus)	Stony Brook University (on leave)

2012 APS OFFICERS

PRESIDENT	PRESIDENT-ELECT
Robert L. Byer	Michael S. Turner
Stanford University	The University of Chicago

VICE PRESIDENT	PAST PRESIDENT
Malcolm R. Beasley	Barry C. Barish
Stanford University	California Institute of Technology

EXECUTIVE OFFICER	TREASURER/PUBLISHER	EDITOR-IN-CHIEF
Kate Kirby	Joseph W. Serene	Gene Sprouse
Harvard-Smithsonian Center for Astrophysics (retired)	Georgetown University (emeritus)	Stony Brook University (on leave)