2008 APS Membership Survey Verbatim Comments

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Question 9: Comments on priorities that the APS should give to public affairs, education, or outreach issues.

US-resident Junior Members

1057538 In my opinion APS doing a very good job, I like to say pleas continuo your good work in science for the next generation, we have to work hard to element future crisis of energy and environment. Thanks APS

1056971 A focus on improving early education is key. While young students my not pursue physics in the future, a better understanding of science in general is important for public awareness of the fundamental concepts and service scientific fields provide everyone.

1057609 APS and AAPT should work together more in the area of physics education at all levels, including public outreach and educating our elected officials.

1058175 APS should concentrate on one or two efforts and do them well. In particular, the most important is funding.

1058549 APS should make sure that it interacts with organizations like AAPT to maximize benefit on issues like science education and outreach.

1058064 Could your guys post the events before the starting dates in our APS News often?

1060047 For a number of these issues, it seems rather difficult to (a) measure quantifiable results, and (b) define the issue specifically enough in a half-sentence survey question that all the survey participants can come to a reasonable consensus on what APS involvement in the issue practically construes. In addition to ranking the overall merits of overarching goals (K-12 education, human rights advocacy, etc.), one might ask questions such as "As part of APS's efforts to (promote diversity, improve K-12 science education, etc.), APS representatives in 2008 did (list specific actions). Should APS place greater or lesser priority on such activities? Can you suggest other activities which might help to achieve this aim?"

1058872 I think educating the public and policymakers about science should be the top priority. Included in this is the effort to improve primary and undergraduate science education. Also, I think the issue of participation of women and minorities in physics should be a priority of the APS, because this is often difficult to address by institutions alone.

1059994 I think that APS is doing an admirable job on all three fronts. Keep up the good work!

1057891 I think that the APS meeting in April was like a talks-factory, no discussion, no interactions, no impact, although the idea to send letters to our representatives because of the omnibus bill was great.

1057962 It's good APS can participate public affairs to help in growing the number of people with science background and concentrate on the opportunities of minorities.

1058620 Let young students know of today's physics job market situation. Do not misguide them by advertising and promoting persons like Einstein.

1057174 more valuable review articles for public

1057922 Of all the educational stages of typical students in the U.S. the APS should be the most concerned in having a visible presence among undergraduates in science. Graduate students should be supported and encouraged through travel and research grants and opportunities. The other key priority is facilitating interactions between scientists and policy-makers.

1056941 Some of the survey seemed vague. What does "improve" mean when improving education for graduates or undergraduates? Certainly improving mentoring for those who contributed so much to build the very schools they attend should be improved.

1058680 The best argument we can make for federal funding is that we need to generate within the U.S. a new generation of technically-minded individuals. I am a scientist for the love of pure research, but pure science (with no directly visible technological benefit) itself doesn't present a compelling argument to fund science. Instead, the APS should focus on the pool of technologically-educated people that pure science produces.

1058711 The universities should significantly reduce the number of PhD candidates they enroll every year since there are not so many positions available for physics PhDs. It is not fair to have so many PhD students just because PIs need cheap PhD to work for them. Actually it is better to inform young potential graduate students of these terrible facts as early as possible since they have time to make a decision to choose their career.

Question 9: Comments on priorities that the APS should give to public affairs, education, or outreach issues.

US-resident Regular Members

1038668 APS should let AAPT be primary physics organization dealing with K-12 issues/teacher education etc .. They do it better as they have members directly involved in k-12 and teacher education. whereas most APS members are not, nor understand the problems. Also, it diverts APS focus away from other high priority issues where APS and its members have expertise and credibility.

1047072 APS should lobby are legislative representatives as vigorously as the Laws concerning non-profit/educational/professional organizations allow.

1021438 "No opinion" on arms-control-related questions because I work for a defense contractor. I believe the best tactic for more science-aware public is improved K-12 science exposure.

1030589 (1) Stay out of partisan politics—squeaky wheels do no speak for me or a majority of physicists. We need to have both sides of congress/political parties to support science—and not just kiss—up to one side. (2) Education and outreach are very important

1021842 1) Interact with grant agencies (NSF, NIH) to reduce discrimination in the grant awarding process. Despite what is acknowledged, favoritism still makes big impacts: a more established scientist will get the grant, even though his/her application is weaker, etc 2) Educate physicists about less traditional areas or research. There is sometimes a lot of arrogance towards people working in areas not regularly associated with Departments of Physics. In today's economic environment people often end up working in this non-traditional environments from need, rather than choice. And very often they end up finding/inventing interesting problems to work on. Even though rooted in an exotic area perhaps, often the solution has relevance from a physics perspective. Sometimes, physics journals seem to have a hard time to find referees with enough openness to review these kind of papers. which, even though motivated by non

1030731 A critically important issue this year is the layoff of "tenured" scientific staff at national laboratories. I believe that attracting top scientists to work on long-range or unglamorous research problems requires job security. A scientist who must fear for his or her job is not free to follow his or her principles in choosing suitable problems to work on.

1055172 A lot of unqualified people are promoting so called "physics education research" which is a bag of crap. The APS should encourage real qualified people to start contributing to that field and help get rid of the pseudo-scientists who are doing their best to propagate their misconceptions and confusions.

1056143 A powerful motivator for young K12 students is the opportunity to attend camps where they arte introduced to research in physics, listen to speakers that have talent for putting physics in terms that they can understand, draw parallels, ethics, etc. An example to follow might be WiCell (stem cell workshop and research tour) program run at Madison, WI.

1022772 A request. There are physicists who went into industry, and retired or developed other businesses. When they (I) eventually return to attending conferences, the other conference's only look for an institutional affiliation on the conference badge. (I identify with women who have prominent bust lines.) It takes time & work to get their attention. When eye contact is finally made, they get self conscious and nervous. Too bad. Most aren't that weird. My recommendation experimenting with removal of affiliation labels on conference badges. Just put their name, maybe just their first name. This will force a conversation. That would be a nice change.

1025977 Affirmative action type programs are insulting to those minorities which says to all that they can't become successful with prejudicial help. Indeed, those minorities who are successful are tainted because their success is contemplated as a result of affirmative action rather than there own intellectual prowess. Any efforts along this line should be directed to all who are interested in physics regardless of their skin color, national origin or religion. However, certainly financial considerations are relevant.

1025563 All of these areas are important. Education and outreach hold higher priority for me at this time with public affairs, though important, trailing a bit.

1040025 Although I am concerned about human rights of physicists in other countries, I think, by in large, that they are better off than those without education and who live in poverty. The APS should be a leader in involving underrepresented groups in physics. Currently, I believe the NSF is far more effective in this endeavor.

Applied physics can often be funded by industry, since its 1041490 potential fruits are easy to see and since the time needed for those fruits to be realized is relatively short. Basic research, however, needs government funding, and in the U.S., such funding depends on decisions by government officials, which in turn depend on their perceptions of what their constituents want. So the APS's focus needs to be on communicating to the general public what the physics community is doing and why it should matter them. The APS website can be a good mechanism for this provided that the average citizen knows about it as a place where they can go to find understandable information on things that they care about provided by genuine experts in the field. We should certainly target everyone who reads magazines like Scientific American or Science News or Discover Magazine, but I'd also like to see the day when articles in Time magazine or U.S. News & World Report carry the URL of an APS web page where people can go to find out more about a physics-related issue.

1052412 APS asks what they should work on. I ask, what is APS qualified to work on? Issues may be important, but APS needs to determine if they are an effective organization. For example, lobbying congress is best left to wealthy special interests that lack any morals. Unfortunately APS does not fall in that category. Their lobbying efforts may be futile. How about the next survey include some information as to how much effort has been put into various activities, and some quantification as to how successful those efforts have been>

1033976 APS efforts to inform the public and government are extremely important. APS efforts to secure support for physics and physicists mark us a just another special interest group interested in our personal welfare, and in fact damages our credibility in public and government education.

1021408 APS has been doing an excellent job across a wide variety of science/physics related issues. It's well known that science education in the broader population is very weak in the US, and I believe this is a detriment to society as a whole, given the role science in plays in many policy/technology issues. I may have underrated this previously, but improving science awareness in the population should be of the highest priority.

1052573 APS is doing a good job on most of these issues. Improvements should be minor.

1032571 APS is turning into a lobbying organization, pushing a short term agenda, next-day approach. If you like my approval APS needs to slow down, ask it's members where we want to head. For example, the US is in and out of ITER. It's embarrassing, as if a child want to play and suddenly not. Funds are limited, not all science is worth pursuing, how do we cut the cake? I have never been asked this question. How would I like to cut the small science cake?

1036464 APS needs to lobby for federal funding. Without funding young people can not get started. There is an extreme need for funding now. Innovation and scientific achievement will suffer in the future for dollars not spent today.

1021135 APS often looks like a Democrat Party PAC. That is not in our best interests.

1040338 APS should also strongly strive for CULTURAL diversity in physics, which means a multidimensional approach to do science. In the US right now (unlike in the period between the 50's and the 70's) the system is quite narrowminded as it is railroaded too much through federal funding. It is imperative to remember that many revolutions or breakthroughs in physics were performed with minimal or zero funding, involving rather with unconventional people thinking (and allowed to think) outside the mainstream. A significant number of small fellowships or awards aimed at promoting risky ideas and approaches could balance the present situation. Rockefeller fellowships, with which one was free to wander around in science, were a very successful example of what I have in

- mind. It could be great if APS will promote this attitude with which free thinkers will be allowed to unleash their creativity.
- 1027020 APS should always remember that we do physics to help society NOT the other way around. It should remain a professional society not a lobbying enterprise merely to help physicists.
- 1021509 APS should concentrate on improving the level of scientific knowledge of all peoples. The importance of the scientific method needs to be integral to all of society.
- 1071968 APS should endorse any attempts and initiatives to increasing the status of physicists in the local and international community.
- 1049933 APS should find a way to help highlight the need to invest in science, both research and education, at University campuses. Perhaps APS could organize a University Presidents' day jointly with funding agencies such as NSF,DOE etc. in Washington.
- 1042542 APS should focus on national problems facing the nation that physics can address such as Energy and Global Warming. This requires expanding the APS focus to better integrate with other disciplines (chemistry, materials science, engineering) to advance related technological areas.
- 1028910 APS should focus on the climate for science funding in general and physics in particular, along with the requesite public outreach. It is also important to focus on the international climate for research and the freedom of scientific expression.
- 1037182 APS should join the AIP and other societies to leverage its resources on S&T funding and lobbying activities, and focus on specific needs of APS membership.. There other societies with more impact on climate change (AAAS, science and math ed, etc. APS is more effective as part of a broad coalition than on its owm
- 1056597 APS should prioritize asap to give much reduced membership fees for double membership in APS and AAPT. I will soon have to make a choice and I won't pay both fees.
- 1029971 APS should promote more interaction between physics and the cognitive and learning science communities. Much of physics education is either counterproductive or reinventing the wheel, and this is partly due to a condescending attitude on the part of the physics community.
- 1029769 APS should provide highest priorities to quality of education.
- 1042057 APS should put education as their highest priority. Their participation in public affairs should be limited to informing the public about the scientific aspects of issues and avoid the politics. Outreach is also important but is not my highest priority.
- 1042239 APS should put the promotion of physics education in K-12 as top priority.

1022914 APS should support blinded peer review (author anonymity) for research publications.

1056496 As a industrial physicist, I've always felt that APS is primarily an organization for academic physicists. I work with electrostatic accelerators (1 MeV to 100 MeV) and feel more at home with MRS or ACS

1035190 As a member of the IEEE society, even though my doctorate is in physics, I find them to be a much more effective organization of which to be a member. I have considered dropping my APS membership more than once since I consider it to mostly be a waste of resources. But since my employer will pay for membership in IEEE and APS, I haven't canceled yet.

As an academically well-performing child and adolescent, physics seemed rather dry, uninteresting. I did choose it as my science elective in high school, but it didn't ignite my imagination. Applied or theoretical examples weren't ever really available to me (or maybe they were and I just didn't spend enough time with those resources). Also, as a female, I personally was never under the impression that physics would really be a possibility for me. It seemed like perhaps obscure, old men in lab coats would be the only individuals worthy or likely to be in the field. This should change. Is there any outreach by the APS that would show young girls that this field could be for them, as much as a career as a nurse? Does the APS work with the national council of Girl Scouts? I have so many ideas, but one additional idea is making presentations about exciting theoretical physics (think Michio Kaku style) to at-risk teens, or schools that traditionally have low performance records. All the kids need is a window to a new world, in order to become interested. The general dry, lab coat perception is probably really intimidating to most kids. I would imagine federal funding would soon come your way as well.

1040388 As with most surveys, the options seemed a bit limited. One note I'd like to make is that it seems to me as if APS could spend a little less on Physics Today and other "glossy" material and spend more on real outreach and educational opportunities, as well as reducing the cost of various services (e.g. conference fees) for professors at primarily undergraduate institutions. I guess what I'm saying is that I don't really think I get all that much for my money as a dues paying member. APS seems a bit more concerned with its own image.

1022520 Assuming that you have a degree in physics, have a look at www.jaypritzker.org/book. The emergent ideas in this new book will completely change the world of physics in the next decade and this century.

1051370 At the national level I have been very pleased with the efforts of APS. However, I believe that much more involvement by members is needed including policy efforts at the local and state level. I also believe that APS should facilitate efforts of members to personally contact and meet federal, state, and local policy makers similar to programs by the American Institute of Aeronautics and Astronautics (AIAA).

1040297 Be prepared to re-prioritize in the likely event of a shortfall in government (and consequent industrial and other) funding for science.

1054676 Because the US funding agencies' budgets for education and research by individual investigators in the basic sciences has remained constant for the last five years, we are falling behind in world scientific programs, and every effort by the science community should be made to correct this situation.

1047951 Being an instructor of introductory physics at the college level, I believe that there is a pressing need for proper training of high school physics teachers. I find that many students who have had high school physics really don't have a good understanding of the physics they were exposed to. And I have also taught summer courses to physics high school teachers who themselves have limited knowledge and insight into physics. APS should try to increase the number of qualified high school teachers that is, teachers who have majored in physics. This would fit in nicely with the goal of doubling the number of physics majors produced in this country.

1036494 Better advertising of existing programs! Perhaps through Physics Today, which is the one thing I read if I am too busy to keep up with all my mail. I did not know of many that were listed on the survey.

1038971 Certain professional societies such as those associated with Chemistry have an active programs or even TV ads to communicate the "benefits" of their work (e.g., chemistry) with public through the help of Chemical Industries. Physics, due its broad and diverse areas of work has not been very successful in communicating the benefits of Physics to the society. Making a connection between what may learn in physics and its benefit to the society may be crucial in attracting great talents to the field of physics.

1026645 Concentrate on excellence in physics education and let political correctness fend for itself.

1046142 Connecting young faculty to high school teachers of science and math is impt. There is a gap here. Technology may not help if we don't understand how to educate the freshmen better and how they learn best and what they are used to.

1023147 Continue the good work

1028849 Currently, there is quite a high profile regarding public affairs issue among the physics community.

1052624 Disseminating knowledge of physics to the general public should be an important obligation of the APS. But trying to scare the public with politically oriented fear tactics is an embarrassing activity, which should be below the dignity of the profession. Scaring the general public into submission is improper for the APS and may actually backfire. Do not tell the public that carbon dioxide is causing global warming and then not mention water vapor, the sun, sunspots, cosmic rays, cloud

formation. It is so much like pseudoscientific attempts to convince the public of a political matter.

1047092 Do more about engaging and educating politicians and worry less about morality in the workplace. The latter will happen naturally as the generations change.

1024956 Don't try to do too much--it results in a low quality effort

1044241 Economy of developed countries can be competitive if only it stands on the base of latest scientific achievements. Energy source is probably the most important subject for the present time. Combining these two statements, priorities for the APS should be in energy related research, with wide collaboration between industry and academy. APS meetings should embrace more industrial fields, i.e. fields of physics where federal support is minimal. Universities mostly pursue research in the fields where grants from federal agencies are available. At the same time, many fundamental problems are still unsolved in the fields which are considered as applied, or industrial. Industrial physicists, being essentially physicists, have very limited representation in the global APS events and mostly separated from the academy by separate meetings, separate publications, etc. APS meetings usually have only one "industrial" or "applied" section, which suppose to embrace all applied fields, usually pretty diverse. As a result, these sessions attract little attention of the applied and industrial physicist, and representation on these sessions is poor.

Educating the public about the importance (and basics) of science and science funding is probably the best long-term investment which can be made in having more scientists elected to the Senate. This is a technological time, but we have tech-ignorant lawyers (and corrupt ones- I live in the DC area) running our country. China has a leadership of engineers. Their GDP is large and rising the dollar is doomed, and so are we, by comparison. We need to ask every person submitting a paper to a journal to write a summary of the implications of the work at an eighth grade level, and then post it on a website advertised to kids AND their parents--eg via PBS and public radio. Since so many receive their funding and career positions based on publications, have them put something back, and something which makes them think about the relationship of their work to other people with whom they live. When we begin behaving as citizens of the world with responsibilities to match, we will receive respect.

1037273 Education should have the highest priority because public science literacy can only become more important as energy and climate issues become more important. Other public affairs as well as public outreach remain important items. It is no longer possible for physicists (or any other scientists) to simply concentrate on research and ignore larger issues involving science.

1056123 Encourage minorities and women to become physicists but physics is best done by those who are truly interested in it.

1025199 Encourage more university labs to bring in high school students during the summer. Invite HS students to seminars.

1029274 Every effort should be made to make science in general and physics in particular more accessible to the public. Not enough is done at present to engage the general public's attention and enlist support for scientific activity. The old stereotypes about physics and physicists are still being perpetuated whether intentionally or unintentionally. Having the support of the public would make it easier to lobby for funding of science.

1030771 Expand participation as much as possible to the membership. Coordinate more of a national culture that celebrates the contribution and need of Physics.

1046728 Expanding the quality of education in the fields of Physics will yield quality innovation. An open, global community of Physicists that displays our innovations (much like ted.com) would also encourage general growth and public awareness.

1027878 Fight as hard as possible the growing anti-science trends in society.

1051996 Focus on academic affairs.

1043078 General public knowledge in Physics areas is at best rudimentary and filled with old wives tales and misconceptions. The best way of approach this is NOT with the existing public electorate, but rather starting in elementary education and being to wait a generation for the results to bloom. When it comes to doing science in schools, the materials needed to work with common level Physics are common everyday materials, even more so than with Chemistry or Biology. Such a grassroots type of program would also provide a stronger perspective for the studies of both Chemistry and Biology.

1021226 Get out of politics and give up trying to grow membership. Understand that the US has already lost the battle for control of technology (as with several others) to China. Enjoying the melamine on your Cheerios? Not sure what is even in your food supply, or where it came from? That is what happened to "STEM" in the US.

1041430 Get Yucca Rad waste approved

1034634 Given all the important issues presented, it might have been more useful to ask the rank the topics.

1040277 Given the interdisciplinary nature of current science, APS should increase interaction with other member societies like ACS (American Chemical Society), AAAS, AGU, etc.. It could sponsor joint meetings, interact with policy makers and lobby the government jointly.

1053261 Good Luck

1055001 Good set of questions.

1024461 Hard to choose, since I think almost all existing activities are worthwhile. From a selfish view, increased federal funding (or at least preventing further decreases) is the most important for the field as a whole, though, increasing diversity (excuse the buzzword) and improving public understanding and perception are key.

1042067 Help facilitate an improvement in the quality of high school physics. High school (and maybe also undergrad) is where a huge fraction of smart kids get turned off physics for life.

1044170 Help the involvement of young people in decision making and policy making through special seats on APS committees dedicated to yound people.

1051229 Helping the general public understand what physics is about, not only in the most spectacular "Big Ticket" projects, but more so in the range of topics basic and applied physics research influences is the most important role for the APS. If the public had a better overall understanding of how physics touches their lives, funding and education issues would progress naturally. (Remember the cancellation of the Hubble Telescope service mission!)

1036595 High priority

1025432 Highest priorities to things that are specifically physics or for which physicists have a very unique voice (like national security). Lesser priority for science-in-general issues where there are other professional scientific societies that also work on those issues.

1054646 I agree with Kadanoff that given the present state of the USA, the science community, including physics, should spend more time on improving the overall education of people in this country. Prying money out of an increasingly ignorant populace is hopeless.

1025129 I am a technical type, a purely technical type. In my opinion, this survey focuses too much on touchy-feely political issues. Although I do understand, it's unfortunate that technical issues cannot be resolved without getting politics involved.

I am ambivalent about lobbying and efforts in the public arena to secure science funding. Physicists are not of one mind about this. Huge programs like the SSC and high energy facilities are probably not a good idea for our limited resources and the needs of the society at this time. I think, however, a much larger role for science in educating the public and our representatives on environmental and technological issues is extremely important and who else will do it if we don't??

1053302 I am concerned about APS's position that global warming is a threat and is human-caused. I feel the science is far from settled. As one who spends considerable time modeling fluid flow (experimentally and computationally), am very concerned about the continued efforts to reduce CO2 emissions, etc., without sufficiently accurate data & models. I fear such efforts are overly political and misguided.

1051097 I am not an overly active member or user of services. Support increased funding, education, and public perception and most of the other things such as diversity, human rights, and ethics will take care of themselves. Science funding in the US has become an embarrassment to the world physics community.

1054373 I am worried about the path of science emphasis and funding in the US and would be willing to donate substantially more time and money to improve outreach and lobbying efforts aimed at informing the public and lawmakers of the value of science (e.g., regular and robust economic studies, like the "gathering storm" report), improving the funding for basic science research (e.g., DOE office of science and NSF), and advocating for a "reality based" worldview.

1038486 I believe that women and minorities problems, together with arms control and national security are problems of the whole society. The the APS must participate in discussions and contribute to solve but do not must be focused on them. By the other side to participate in educational programs, thus change the mind of future generation, is the kind of problems that APS must be really aware.

1055768 I did not see anything on public policy affecting employment of Ph.D. physicists.

1033734 I don't understand the questions on "diversity" in physics. Physics is diverse. The only requirements are that one is good at it. The best physicists I know count women and minorities among their peers. Should we really promote "diversity" where there already is "diversity".

1047739 I especially appreciate the APS assistance with sending letters to representatives urging Congress to pass budgets supporting science.

1027545 I feel that all three of these can be dealt with effectively by better K-12 education, including outreach by local universities and colleges. In particular, improved demonstrations and laboratory experiments, which are simple, fun and instructional. Lab demos keep the attention of the children, so they learn while having fun. Over time more students will decide to take physics at undergraduate. This approach is more long term and will result in better physics stability in other issues.

1046314 I feel that some of the advocacy issues listed in the survey would be more effectively handled by the AAPT rather than the APS.

1045969 I feel that the APS has been doing a great job on what I view as the most important issues in recent years. Keep up the good work!

1032076 I find that the APS has not made progress in disseminating physics at the K-12 level. US students are not attracted to careers in physics, why?

1045424 I gave practically everything highest priority. The point is that the important challenges to APS are multifaceted, yet all need sustained attention.

1050450 I have considered cancelling my membership because of the political activities of APS, which are usually self-serving.

1021307 I have enjoyed participating in the "adopt a physicist" program for the last two years. Priorities will vary depending on who is elected president. Education and lobbying for funding will be more important with McCain/Palin.

1048386 I have in the past been actively involved in k-12 outreach programs and work on improving high school physics. Both are valuable and physicists should be involved but APS has finite resources and other efforts are more important. Also it has been my experience that programs designed by high end professionals in mathematics and physics are generally unsuited for the students and teachers who mostly take and teach them. Even the Feynman Lectures in the end proved unsuitable for the average Cal Tech student.

1050602 I have not renewed my membership for the first time in almost 15 years. My research has shifted to an area so that I no longer present at APS meetings, and therefore I do not find the benefits worth the cost. I can only afford a certain number of professional society dues, and have to choose the ones that fit my research and other interests.

1055950 I have put "highest priority" on several different issues. I guess that improving K-12 education would be my choice for highest.

1048851 I have the impression that the APS over-promotes expensive high energy physics and string theory at the expense of applied physics and looses public support thereby.

1042047 I have watched the quality of K-12 education un the US decline steadily and feel that this and developing vehicles for better informing the public of science fact (rather than fantasy and pseudoscience) are vital to the future well-being of the country. Also, the decline in this country of both federal and industrial support for basic research is effectively eating our seed corn--we must make clear and get leaders to understand that continued advances in applications can only come if those applications have something--basic science--on which to be based.

1020457 I haven't thought much about the issues and don't have strong opinion about the priorities. Improvements in ethics and physics education should probably be priorities. When it comes to physics education, improvements in mathematics training on one hand, and advanced experiment training on the other, should probably be some of the priorities.

1052290 I hope that the APS interacts more with the researchers out of USA.

1029608 I know that APS engages in many activities related to policy, science funding, education, women & minorities, etc. I see all these things as important and it's difficult to rank them. It's the mission of

a nonprofit scientific society to promote research, education, and scientific literacy. And that is what you are doing. Keep it up!

1028809 I really felt nearly ALL of your goals were very important and found it very hard to prioritize them.

1055900 I recently started coordinating the undergraduate science volunteer program for my children's high school. I found that many biology and chemistry students volunteer, but only 1 of 20 was a physics major. When I asked the physics dept rep, I was told they work their students too hard to find time to volunteer. I'm not sure what the impact of an undergrad physics volunteer is in a high school classroom, but I would think it's a big plus. Perhaps physics departments should give incentives for their undergrads to do some volunteer work in the local classrooms. It will help the physics teachers, and it might inspire more students to go into physics.

1024895 I salute those who find the time to make these efforts happen.

1045181 I strongly oppose APS declaration on global warming. The APS governing body has no expertise in this matter. This politically motivated declaration will be an embarrassment to the APS if it turns out to be untrue some years from now.

1031964 I suggest you establish a website for video clips of physics demos. This could be a section under Youtube. Presently, some video clips are available on Youtube, more are traded privately among teachers. APS has the clout to organize an "official" site that selects and ranks the teaching clips, with proper credits assigned to the contributors. I believe such a site would be very popular, and very helpful to the students and educators alike.

1032854 I teach at a PUI and each year teach a course for non majors to which I devote considerable time. So I am partial toward undergraduates. But I believe we must approach public affairs and public education carefully and respect for the public.

1046112 I tend to interpret the role of the APS as primarily to foster a high standard of technical accomplishment in the various subdisciplines of physics and allied areas (i.e., history and philosophy of physics). This primarily consists of effective publications and meetings and providing on-line, low cost access to archival papers and publications. I am less supportive of APS initiatives in social and political affairs.

1032915 I think "diversity" comes if one works on K-12 education. I also think there is a lot of "diversity" in physics. If by "diversity" one means "American black physicists", I think that is mostly a cultural and economic issue. Most faculty across the board (not just in physics) feel that the only thing worth doing is going to graduate school and doing academic research. If we don't worry about jobs for students, we won't have any students. We need to broaden our contacts with the rest of the world so a physics degree isn't a narrow, arcane ticket to nowhere. Business schools have robust placement programs. Most physics faculty wouldn't even know where to look for a job outside of "academe". I also

think it is important to think about what all those little kids who aren't going to major in physics need to know, and teach it to them. Most faculty got interested in physics for reasons other than research prestige. Maybe that youthful excitement can help them connect. If one reads a newspaper (or, gasp, the Web) once in a while and looks for examples of how physics shapes the world, maybe students would come out of undergraduate physics with more than just a mediocre but passing grade and a sigh of relief.

1025371 I think APS does a great job!

1034270 I think APS should encourage its members to be more actively involved in outreach programs such as helping students and teachers at local elementary, middle and high schools to improve the quality of their science projects.

1029587 I think APS should give some thought to becoming more like the AMA. The AMA seems to be able to keep doctor's salaries very high through its control of who gets to go to medical schools. How can the APS do something similar to this in order to increase the salaries of physicists? Forty years ago, physics faculty were near the top at universities. Now they not much above average.

1050127 I think for the APS to be seen as a politically active organization is counterproductive to the stature of physicists as objective sources of unbiased, factual information about our field of expertise. Our politics is best expressed as private citizens, and we can join activist organizations if we choose.

1025896 I think global warming and running out of oil are serious threats to civilization and maybe even to human life. Physicists need to contribute what they can avoid this potential catastrophe.

1055374 I think global warming is a real issue that the public is refusing to believe is mostly a manmade problem. Even the most intelligent people see it as a natural earth cycle and aren't wanting to make economically difficult decisions to control it.

1031833 I think graduate phy education in good shape, so I gave it a lower APS priority than undergrad. I believe APS should continue educating k-12, phys teachers, politician/policy makers, and the public about physics. APS should be the voice to explain how physics impacts and improves the lives of ordinary citizens (helps to get funding). Finally, APS should reach out to its women/minority membership and continue the CSWP/COM site visits.

1052725 I think it is critical that APS trys to have people in leadership positions who understand science and engineering. Look at our congress!

1025098 I think it is important to educate the public about important issues where physicists can have an impact. For instance, I think the public has a very poor understanding of energy. If the public is to make

good decisions, it needs to understand the options and trade-offs for trying to improve our energy situation.

1028283 I think that physics education at younger age, high school, and college is most important in raising the awareness of public to importance of the science in every day life.

1045949 I think the AAPT, rather than the APS, should be the group concerned with education at the K-12 and undergraduate levels, but I can't make a case that that concern should be exclusive— it's a matter of balancing priorities and focusing effort. I think the central concern of the APS should be the intellectual health, vigor, and vitality of the American physics research community and the elements that support it—corporate and government funding, graduate and postgraduate education, employment, conferences, and any related enabling functions I've left out. One implication of this, for me, is that we support women and minorities so that members of those groups realize they are part of a supportive organization when they join the APS. Both AAPT and APS have issues to bring before our government and the public and I see no case to make for one rather than the other to take the lead in engaging those groups.

1055394 I think the future of physics in the US depends on improved formal science education (at all levels) and informal education of voters and policymakers about the benefits to American society of a vigorous physics community.

1023713 I think the public perception of science is the most important issue. Legislators will support science funding, education systems will make life easier for science programs, these things will happen automatically when the general public sees science as important. One specific area missing from this questionnaire was the entertainment industry: I feel the portrayal of science in movies and television is an important contributor to the general public's perception of science and scientists. Perhaps efforts should be made to facilitate interaction between scientists and movie/television producers almost as much as between scientists and law makers.

1031247 I think the reward system in this field (at least in HEP) is so skewed by personal relationships and a widespread lack of a fairness ethic in leadership that it's a waste of time to focus solely on how these issues relate to women and minorities. Our leadership committees seem to be filling up with whatever dullards happen to get Ph.D.s from the 10 or so high pedigree institutions, as if their brilliance at age 22 makes them qualified leaders for the rest of their careers. Making sure that politically connected women and minorities play a more proportionate role in how this is damaging the field is a misplaced priority.

1036282 I use my physics background to invent and develop industrial products. I'm afraid my answers reflect my isolation from the physics community.

1027666 I was not sure how to rate the priorities. They all seemed to be top priorities. In situations like this, what I typically try to decide is what kind of an organization I want this to be. It could be mostly to help members, it could be mostly to communicate the field, it

could be mostly to provide information about what has been done in physics. Typically, once I know what the central mission is, then I can prioritize. If for example, it is mostly an organization to connect physicists to one another, deciding what to do about missile defense may not be important. If it is to be a physics lobby organization, then improving funding is important. I am not sure these areas can be prioritized without first knowing what the organization wants to be for its members. Anyway, I know APS can't do everything, so choices have to be made.

1042138 I wish APS would stress more the fundamental aspects of science (basic research, critical thinking, the scientific process), rather than trying to follow the fashion trends induced by the media and/or non-scientific opinion-makers. The public should be aware of the *fundamental* aspects of physics which make it unique and essential for achieving further progress.

1023854 I would like to see the APS address the benefits of obtaining degrees in physics even if one's ultimate goal is not to work in academia. As someone with a master's degree in physics, but not a PhD, and as one who works in industry, I often find it difficult to relate to the articles in Physics Today and the other APS publications. I would like to see a broadening in the scope of these publications.

1040116 I would prefer that APS continue to be a scientific society rather than a political lobbying group. A small amount of political activity is necessary. However, I think that APS presently commits too many resources toward political goals rather than the goals of the greater physics community.

1044029 I've grown up in Germany and as far as I (and most of the foreigners I talk to) am concerned the general awareness about science (and the benefits this society gets from it) is frighteningly low in this country. The science curriculum in schools is lousy and the students I am dealing with excel in multiple choice tests but lack the basic ability to tackle problems which require independent thinking. The emphasis is put on pseudo achievements where high school students do 'first class science' (e.g. LHC physics for 6th graders) but are basically parrots who repeat what they are being told without any understanding what this is actually about. Science is fun and should be brought to kids but it should be done at their level and those parrots shouldn't be presented as the shining example.

1040358 If physicists develop energy autonomy for the United States, we will no have to fund dictators in other countries and the world will be a safer, freer place. I hope that you will choose to emphasize this objective.

1056193 If we improve science education at the K12 and UG levels, a lot of other problems should resolve themselves.

1049650 In public education, should emphasize those areas in which physics expertise is truly important, such as missile defense, or the impossibility thereof.

1040106 In spite of the fact that all modern technologies are based on discoveries in physics, and in spite of all outreach activities conducted by APS, general public does not appreciate physics at all. Therefore I doubt if APS involvement in public affairs is worth time and resources spent. Physics course should be mandatory in high school, and not just one year, but at least three years. This should be promoted by APS. Other APS priorities should be promotion of clean energy technologies and addressing the problem of global warming.

1047668 In the end, in this and the previous APS survey in which I participated, I found the questions largely useless. I am a physicist struggling to find a job -- in *any* country -- and the priorities of the APS don't matter to me at this point if they don't help me get employed first. At this rate, I won't be able to be a "physicist" much longer. *This* is where the APS should focus its efforts, and all of the preceding questions can be answered automatically, ranking issues by their relevance to the principal concern of continued employment.

1049216 Increase public awareness of physics

1038385 Inform politicians at all levels and society at large about (i) what physical sciences are (they often know nothing about it), (ii) how important they are for the long-term well-being of our and other nations, (iii) why we need to support basic research, where scientists define the next important directions, and (iv) why it is important to significantly increase funding levels in science and technology in the US. Right now, we do not have means to attract and retain talent in physical sciences, we are less and less attractive for the best scientists from other countries who in the past contributed to the success of the US physics and related areas, and we may not be able to maintain the high-level of science in the US with the relatively low funding levels and other societal problems the US is facing at present.

1045404 Inform public about physics

1052765 Inform the public the latest achievements in physics and how they might benefit the society

1026938 International cooperation has gone on forever ad needs no help. National barriers do not exist.

1036060 Involve industry as much as possible. Increase job opportunity selection for people holding degrees in physical sciences.

1043583 It is a struggle for physics not to appear as a man's club. Making the physics topics more multidisciplinary may help this (eg., biophysics, ...)

1047375 It is essential that public policy issues be firmly grounded in science without getting caught up in the politics. We must also realize that even scientifically informed people will disagree on the implications of data and on policy prescriptions. As an example, it has become all but impossible to even estimate the consensus within the

scientific community that global warming is human-induced. We should be willing to wade into contentious subjects, but we must allow honest disagreement.

1038527 It is important for APS to be involved in government, education, and in the community to try to encourage greater interest in physics and research.

1021610 It is unfortunate that the APS meeting is in March which is a time that most undergraduate students interested in physics are unable to attend. In an ideal world it might be interesting to have a meeting in "undergraduate/high school physics research and education" scheduled during the summer months.

1045787 It may do more for the credibility of organizations like the APS to concentrate on physics, perhaps a little also on engineering and technology, moderately on political matters that affect these, and not be entangled in political issues that are remote from physics.

1054737 It seems almost a crisis. Too many issues at high priority. There are some not even on the radar.

1052674 It seems to me that 1st priority is our grass roots and that includes doing all that's possible for K-12 physics/science/math education as well as doing what we can to enhance public perception of what we do and get away from the myths of what physicists do

1049701 It would be interesting to understand what sorts of constraints the APS has (resources, etc.) in working on the issues listed, since ALL of them are worthwhile. Also, I'm not sure what the AIP and other organizations concentrate on, and what coordination there is. I suspect many other APS members are also unaware of these sorts of contextual issues...

1033502 It would be nice to have an on-line discussion group that would handle these issues on separate threads. There would need to be some kind of manager to continuously organize the thing. It also needs to be user friendly.

1043361 It's going to be all about alternative energy. Research, baby, research!

1054757 Keep bureaucracy within the AIP APS organization to a minimum. Difficult balance: keeping the actual support and interactive functions for the physics community at a high level without continuing to enlarge the \$\$ burden on members. I hope that continues the good pattern experienced in the past.

1053524 Keep physics clean internally and worthy of public and private trust. Keep informing the public and private sectors about the value physicists bring to their worlds. Maintain high standards of skill within the field. The rest will follow.

1020922 Keep up the good work!

1037809 Legislative education on the importance of science should be at the top of our priorities. Mike Lubell has done a good job, but it's clearly not enough. We need to unite all of the scientific and engineering societies and figure out how to push the continued support of science, which is the only viable path to our continued prosperity.

1022106 Main focus should be on physics, only minor activity in politics on all fronts.

1034856 Make physics fun and cool for K-12 students.

1048336 Many of the activities are freighted with political baggage.

1049630 Many of the priorities of APS are tightly coupled: for example, obtaining increased funding for physics, improving access to policy-makers, increasing and improving the public's perception of physics and physicists and this coupling should be taken into account when addressing these priorities. Further, it is absolutely essential that we as a community make the public and policy-makers aware of our special gifts -- the ability to analyze and mine large data-bases, apply powerful, elegant and versatile tools to a wide range of complex problems and draw connections between seemingly unrelated phenomena because we analyze them at the deepest level. It is my fond hope the with effective, innovative and above all, honest public relations work, we can make all concerned aware of the truly great contributions that scientists, in general, and physicists, in particular have made and continue to make to our economic growth and vitality.

1050096 Maybe more than educating the youth, the public, and the government about the facts of physics, I think we need to find ways to educate them all about the methodology of physics, and contribute to their developing logical and quantitative thinking about social and economic issues. We should also help them understand the limits of science, e.g., how, after you have learned all the facts and drawn the scientific conclusions, drawing consequent social and economic conclusions involves invoking value functions that are outside the realm of scientific inquiry.

1046425 Money drives today's mainstream science. Many more students would benefit from a better distribution of Federal grant funds. APS should promote more grants with smaller amounts, from NSF. Hundreds of faculty in colleges across the US can get a lot accomplished with \$20K/year. More money for K-12 is critical.

1051451 Mostly, my answers are skewed towards K-12 education, followed closely by undergraduate physics. The idea that physics can be a "liberal arts" major is a good one. There is no reason why physics could not be an excellent jumping off point for any number of careers.

1020497 My biggest issue on a personal level is the lack of availability of insurance programs, such as health insurance, through APS for those over 65 or 70. I think these should be available up to 80. People are living longer and contributing longer than decades ago.

1035413 My involvement in Physics is merely to keep abreast of the field as I am a Research Computer Scientist with advanced degrees in

Computer Science. I have a continuing interest in physics which is why I avidly read almost every issue of Physics Today. My perception is that the overall trend in the US is a degradation in interest in science, but particularly in Physics, Mathematics, and Computational Science. Developing programs to foster and encourage interest at an early age, such as elementary school, where students often ask "Why is the Sky Blue?" and other interesting questions, with answers that will stimulate curiosity, will lead to continued curiosity in high school and college. If students are excited at an early age and get appropriate reinforcement, they will continue their interest in those areas for the rest of their lives. Additionally, emphasis should be placed on more articles explaining physical and mathematical phenomena to the public. I doubt that the average American could read Physics Today and many would have trouble with Scientific American. The density and terseness of articles in Physics Today would turn off many Americans. A magazine on par with Time, but focusing on Physics, Mathematics, Engineering, etc oriented to grades 10-12 to attract those students might also appeal to the average American. Many people I know of are afraid of "equations" in articles. In part, this is due to, perhaps, bad experiences with Mathematics and the fact that the equations are not often explained carefully or thoroughly. Thus, they shy away from such articles because they believe they will be too complex. Acclimatizing younger students to expressing concepts mathematically may erase these fears and make for a more science-literate population in the future. I used the Berkeley Physics Series in college many eons ago. Unfortunately, I am not aware of anything on par with that effort, but it seems like it might be time to conduct another textbook writing exercise such as that to update that series or rewrite it. Creating a one or two year program for middle school students along the same lines might be a good idea. Developing a TV series on "Great Experiments in Physics" (similar to some of the programs on the History Channel) might also engender interest. Part History, part Demonstration, Part WOW-factor might attract a youthful audience if properly oriented. These are a few suggestions that might help.

1026231 My priorities guided by the principle that the APS should not duplicate priorities that will be accepted by other elements of society. Do not duplicate the governments' mandate to do defense or security work or industry's self interest in development. Support all levels of education - with less to graduate that will be supported by industry/government in their own interest.

1054040 My results are probably skewed since I worked in the DC office of APS for 2 years. Feel free to disregard them as not being "representative" of the "average" APS member.

1053867 No science organization that I am aware of [or a member of] does an effective job in representing the science constituency in Congress, and the APS is no exception. e.g. 1. The Office of Science in DOE prevented the National Labs (which at least have a track record) in providing effective advocacy under the current administration what track record does the APS have in building up support for more Federal \$ in support. 2. The APS seems to me unfocused. E.G of what value is Physics Today? Who's it written for? Why an annual change at the top (President, etc) and they tend to be part time positions at that. 3. The

Washington activities should be proactive and should be giving advanced warning to members, not merely a report of what's going on in D.C. Emails to congressmen are a waste of time, particularly at the last minute, from my experience. 4. The APS building is very inconveniently located to anything, so how can the APS be in the mix of what's going on in D.C.? 5. The international activities don't seem to have any impact at State, where foreign policy is set, or any value in getting support. Moreover, students today take international for granted, either from their own travels, or parents who work in a global economy. Also, many have dual citizenship. 6. The diversity, gender issues are social issues, not physical science issues and I think a distraction from what APS should be doing. I see plenty of women in academia today. How did the APS help? Why should the APS be involved?

1027909 None other than to say that I really enjoy the occasional article in Physics Today on the history of some area of physics or some historical figure in physics.

1021468 Nuclear Physics education at the graduate school.

1053231 One additional way that the APS might have a positive influence on the community is to help provide broader perspectives. We often get caught up in the minutia of our work and sometimes lose track of how everything fits together. Providing broader perspectives, in a way, gives the APS the responsibility to say what is important in the field and what is not. Of course, this is determined on a semi-grass-roots level through peer-review of research proposals and of publications. However, a little more insight and perhaps some guidance seems to be in order. In the APS News, for example, the APS could provide a (much) less bombastic version of Bob Park's weekly diatribe. There are policy statements from the US administration that influence funding trends and attempt to set priorities. Could the APS provide some feedback on how that is playing out in the community and how (if at all) it affects the direction of our field?

One of our biggest problems right now is that we're no longer getting the brightest minds to go into physics, and students from other countries are either not coming anymore or leaving us for better deals in their home institutions. This has to be fixed somehow, meaning more funding for physics and physics education. So, we need to communicate with the public and convinced them to support more funding for the physical sciences and science education programs. We need to ask politicians for more funding, but we also need to create more education programs, particularly for science teachers. Local students still hate science, physics in particular, and I believe it is because science teachers are afraid of science themselves. We need more programs to enhance the teachers' ability to teach science. We need to make teaching a good alternative for physicists and we need to make science teaching look cool.

1047214 One of the key issues for me personally is that APS seems to be in mission creep. It is creeping onto missions of AIP, AAAS and other societies that focus on activities relating to external relations of the physics research community. APS should focus on research funding, research facilitation, and related activities. Leave everything else to the other

One of the most annoying things of the recent past has been APS resources squandered on Estate Planning. Just because a subset of old influential office holders (past and present) need this service gives APS no business engaging our valuable membership dues in it. Then why not have seminars on parenting and investing 401(k)s and other such issues relevant to younger physicists? If the profession is to stay healthy, the most important mission APS can take for itself is to find physics-jobs for all Ph.D.s in industry as well as academia. This may mean reducing cheap graduate labor (which is offered Ph.D.s) and then throwing them to the whims of the economy. This is done because we simply do not have jobs for everyone to do physics after their Ph.D.s It boils down to limited funding, which APS should try to remedy. It may also mean hiring more nontenure track though permanent well paid technicians at the Ph.D. level instead of nth year post-docs (again cheap). Such efforts to change the system are far more valuable than doing Estate Planning seminars for wellpaid old physicists.

1049074 One problem I had filling out this survey was that I often felt almost everything should be high priority.

1029739 One should get together with other scientific organizations to promote higher pay for science teachers in K-12

1047749 our country seems desperately behind in science education and critical thinking. It sometimes feels like we have a well educated rational minority and a poorly educated irrational majority. Anything we can do to promote science education and critical thinking is important. This is especially so in the K-1 through K-12 arena.

1048720 Our highest priority should be in educating the general public. An important way to do this is improving the science education, especially physical science, of K-8 teachers. A second important way is to provide the resources for teachers to teach science well. If we have a more science literate public and government, many of the other issues such as energy, missile defense, and climate change will be easier to tackle.

1040782 Our national labs are suffering due to consecutive continuing resolutions by congress. We need to enhance the ability of the physics community to make the case for their research dollars and get representatives to fulfill their promise to enhance science research and education.

1048497 Outreach calendar (public lectures, etc.) would be a great idea, showcasing what outreach activities are going on throughout the country ordered by date. This could be incorporated into APS news.

1026463 Outreach to Congress and public officials is essential, as is already being done.

1033835 Outreach to schools and educating the public about the beauty and worth of physics should have the highest priority.

1028920 Overall I think that the physics community and APS has done an excellent job with diversity. Educating the public concerning physics is

much more difficult. When I heard on public radio that the cause of the current financial situation on Wall Street was that "Rocket Scientists" had formulated financial instruments that no one understood, I knew that we had not gone far from the mad scientist in the 1950's B movies.

1050612 Overall, APS has been doing very well. APS should make all the good programs that it is involved in much more clear. There were a couple of programs that I was not aware of. Increased lobbying to the congress is probably the highest priority. Any success is tied up to funding provided by the government. If that dries up, we will probably be doomed. Thank you!

1046223 Overall, I am satisfied with what APS does in terms of public affairs and education. Keep up the good work, and keep working on educating the average John/Jane Q. Public about the importance of science. The US is abysmal in the public's ignorance of the scientific process, which is why creationists continue to make inroads into school syllabi.

1025119 Perception of physics in the media is often poor. Anything APS can do to counter this probably pays off significantly in other areas. And lobbying in DC is necessary, if painful.

1050117 Perhaps make it easier on the aps web site for someone in the public to find "primers" on various topics in physics. For example, if someone wants to find out more about global warming, it would be useful for a pointer on the aps web site to a _reliable_ source of information on that topic, and it should be easy to find this. Perhaps a site (connected to the aps site) that breaks things down into topics (e.g., energy issues, environmental issues, basic physics tutorials, nanotechnology, ...), and if someone clicks on one of those topics, would bring up another page with both general information about the topic and additional links for more detailed discussion. Also have a search engine if someone is looking for a particular topic.

1025533 Physicists have done a good job. Their past willingness to do the difficult job of prioritizing projects has earned them a respectful ear from government funders who are not always interested and/or knowledgeable. Continue the good work. Most of all continue and enhance the "front-end" part of lobbying: educating the government, the general public and, most important, young students about the value of physics (and science in general) for improving society's well-being.

1028273 Physics and scientists in particular occupy very little space in the mainstream media in the United States. When do you see outstanding American (or foreign) scientists in prime time TV interviews? We should challenge the media to get their facts from the scientists, not from journalists serving as intermediates. I want to see Steven Weinberg on Larry King Live!

1029961 Physics is a science toward unlimited understanding of the universe and better human life in the universe, but not a political tool to enlarge the separation of human kinds by providing more defense needs and to make more tax payers money spent on more expensive weapon systems.

1055576 PhysTEC is a great program. I would like to see it expanded,

and also I believe more attention should be given to preparing and supporting elementary teachers to teach science (particularly physical science) in the early grades

1026261 Please be an advocate for access to part time night and weekend accessibility to graduate programs in physics (MS and PhD). Please be an advocate for reconfiguring MS and PhD programs to enable industrial scientists to make a smoother transition.

1042532 pointing out the importance of science (not only physics) in an era when creationism is spreading is very important. Improve science education (address both teachers and students) and focus on global warming are very important points which I would like APS to pay attention to!

1022601 Post docs and part-time (seasonal) profs are still in a bad situation for career stability and opportunity. It appears that their numbers are increasing. Their rights ought to be addressed. Too many departments are seemingly chasing buzz areas for new tenure track hires (similar to financial investors creating bubbles). Perhaps a local/regional/national strategy could be enacted to partly address research areas and decrease the entropy of the job markets. Established areas are still enabling areas....

1023743 Priorities as I see them K-12 Industry & University working together Fed funding Physics University education student support.

1046718 Promotion of high school physics education by APS would be very valuable for the future of physics in USA

1040136 provide financial support to those who make or plan to make strong outreach efforts.

1044009 Public awareness is critical.

1051087 Public education about physics and physicists is very important. Minority and women's rights should be defended where they are discriminated against - does that happen today? - but not simply to artificially increase their participation in Physics. Public statements on policy issues should clarify the issue with facts rather than state opinions - do YOU understand the physical processes that create global warming from human activities and why warming occurred before humans created it? If not, you do not have the information to add facts to the discussion.

1040348 Public perception and understanding of science is pathetic and leads to misinformed voting on critical issues, such as climate change, energy policy, health care technologies, technology funding, etc. The public is too eager to believe what they see on TV as truth, and seem to have difficulty distinguishing between TV fantasy (ghosts, miracles, magic, etc.) and physical truth. Education and a persistent presence of science in the news is critical to counter rampant ignorance and superstition in the voting population. How can we expect to have quality policies, laws, and education without a culture that understands and values science? I'd like to see more coordination between the APS and

other professional societies to promote science in education, public policy, and public outreach.

1045757 Put effort into only those items that APS thinks it can actually make a difference. for example, human rights - although a worthy cause, APS's voice is just not heard in repressive regimes (unless scientist is of international renown) at the level that makes a difference.

1031843 Put effort where it is important, of course, but also where it complements those of other groups/promoters such that the overall impact is maximized. Not everybody can (nor should try) to do everything.

1054282 Reduce APS membership dues

1050167 Remind the undergraduate institutions that providing solid and thorough courses in physics for physics majors is more important than overemphasizing "research projects" that do no help in surviving graduate schools. Remind those who are teaching introductory physics that if the majority of the students finish the course with negative attitude about physics, in the future, that will translate as negative support for physics research and other related endeavors that might be undertaken by the physics community.

1040712 Science / physics is not a case of "no-physicist-left-behind" highest scientific quality needs to be maintained and strived for public outreach that waters down quality needs to be avoided.

1026221 Science education and in particular physics education is no longer a priority in our high schools. This must change if we are to stay competitive in the 21st century.

1029941 Science education must be our number one priority for the foreseeable future, or we _will_ lose the technological and scientific advantage we have enjoyed for the past 60 to 75 years.

1034593 Science outreach should an essential component of the APS activities.

1040883 Scientific literacy of the public is very important. It seems that many law makers look at their constituents on how to vote, even though they may have a better science literacy themselves.

1040984 since you are asking in an election year of simultaneous economic crises, it is hard not to feel that APS's top priorities include enhancing the public's awareness and opinion of science and to push for more funding for basic research.

1053706 So much seems to be concentrated on the biggest research schools. However isn't it true that the mode for physics graduates each year per institution is zero? I'm in the middle of the pack but still feel that the APS concentrates on research institutions only. And of course their faculty members actually have the time to work their way into the APS hierarchy. It seems to me to be unbalanced.

1046920 some of my "drop" recommendations are based on there being other organizations (AAPT for instance) that are better suited to doing the jobs. So while everything you've listed is important, APS can't do everything and should concentrate on a subset. Particularly important are public perceptions of science, and issues relating to dealing with Congress.

1033885 Some of my answers are not the highest priority, such as improving graduate education and undergraduate education, because I feel so much has been done to improve these already. There is a lot of information out there to guide the interested physicist.

1046455 Some of my colleagues who are physicists say the field is dying out. I think physics is more important today than ever. Their concern, is that to find funding for basic science these days is getting harder all the time. People in general aren't interested either in science, or at least not the physical sciences. I think this is a perception problem, and things go in cycles. As a society, we should promote the field we love. Not only because we work in it, but because it is important to do PR to the entire spectrum (K-12 and Washington and how it views federal money spent on science. I am all for applied science, but I figure thinking way out of the box is important too.

1041450 Stick to core purpose - physics knowledge, research and education. What does human rights have to do with a physics organization? I understand that many physicists are concerned about HR (as I am), but there are other organizations for this.

1030529 Stick to science. Get out of partisan issues.

1051855 Stop all the politically correct 'crap' and focus on physics. Madame Curie, Lise Mietner and other women are among my heroines because of their contributions to physics, not because they were women. Don't make the APS a social experiment. The cream rises to the top regardless of gender or skin color.

1047678 support young scientists in physical society

1037576 Thank you for asking.

1027808 Thank you for this opportunity to participate.

1022964 Thanks for putting the survey together. Good Luck.

1045505 The AIP has been very proactive in promoting increased funding for science. These efforts are vital and much appreciated! It is too bad that other professional societies (e.g., the American Chemical Society) have not taken up the cause as well.

1025412 The APS is most needed as, and does a generally good job as a general advocacy for physics and physicists. Meetings, etc. are also very important, but are more 'cut and dried.' The only complaint I have is that some of your international programs seem somewhat politically biased.

1028465 The APS is to be commended for its efforts on education, outreach and public affairs. This questionnaire is an example of how member input can be measured to better meet the needs and wishes of physicists.

The APS should concentrate on the promoting high standards in the physics education and research at the colleges and universities. It should also facilitate communication/research between national/industrial labs and academic institutions. It should not invest significant resources outside these areas. In particular 7-12 education is very important (so are a lot of other activities) but there is an organization, AAPT, deeply engaged in this already. Ensuring that we do a good job in physics degree courses at third level is the greatest contribution the APS can make to the solution of the problems in the schools.

1034705 The APS should do more to engage in addressing the broader career paths that physics undergrads and phds may undertake.

1030004 The APS should educate the public on the physics of driving automobiles safely.

1030367 The APS should have a more balanced approach to advocacy. We frequently receive solicitations for letters to our representatives to support increases in funding for the national laboratories & major initiatives, but I never recall similar requests for support for increases in funding for university research groups.

1020205 The APS should lobby the funding agencies to increase the geographical breadth of research funding and resist the effort to heavily concentrate funding in the "top" schools.

1028950 The APS should work to help Congress understand the value physics provides to our modern society.

The APS/AIP gouges its members, and the public in general, by charging exhorbitant fees to download scholarly articles that have been published in the APS/AIP journals. I work independently, and pay close to one thousand dollars per year to access PROLA and the JAP/APS archives. I have been a member of the APS fopr three decades. Yet, if I need to refer to an article in other APS/AIP publications, I am charged \$50 or \$60 per download. When did the APS/AIP cease to be scholarly organizations and become for profit institutions. The situation is similar to the health insurance monopolies, where the APS/AIP (holders of the publications' monopoly) gouge the public. I have exchanged correspondence with Judy Franz about these issues, and the results were disappointing. The only reason I remain a member is to act upon my support for the Physics endeavor. When the APS/AIP charges me \$50 to download an article, they have utterly failed their mission.

1050935 The biggest impediment to introducing physics at the undergraduate curriculum level is the ill-preparedness of the students entering this stage of training. This is a serious problem that needs to be addressed from the grass roots. If this is not addressed, the perceived

competitive advantage that the USA currently enjoys in cutting edge research and graduate training will soon vanish.

1042007 The damage has already been done at K-12 levels. We have an entire generation emerging with little or poor knowledge of science, and it is not clear if much can be done at this point to change their views. It is vital that we not lose the next generation currently entering K-12. This problem is much larger than physics and the APS might benefit from partnering with other professional organizations in attempting to address it.

1020902 The energy crisis and climate change are the greatest challenges facing humanity. If increasing use of fossil fuels leads to catastrophic irreversible outcomes, then game over. Physicists have an important role to play in addressing these challenges. We have a fundamental moral obligation for this to be our highest priority.

1046798 The federal grants should increase substantially to support national laboratories as well as universities in order to achieve breakthroughs in technology. This is very important as today's Physics will transform itself into tomorrow's technology as has always been the case!

1037980 The goals listed are very broad. What is needed is better development of specific approaches to achieve them.

1044534 The greater collaboration with other field, especially engineering fields would be necessary and useful for all.

1055031 The main priority for the APS should be enabling the exchange of information about progress in physics within the physics community.

1032561 The most important role of the APS is providing a professional structure for the research and educational activities of physicists (ie publications, meetings, topical conferences and workshops). The next most important role is to provide scientific advice and education to all members of our society. This includes international, national, and local issues. In describing the role of physics in our society to others we should be forthright rather than defensive wherever possible.

1054717 The most important thing is to continuously stress to policy makers the need for rational discourse and data-driven decision making. Part of this is the need for a larger amount of funding for basic research, and to educate policy makers about the value of basic and applied research activities.

The most important thing the APS can do is to increase the public's science literacy. That means to emphasize precision in applying scientific logic and knowledge. The AP can be more outspoken in the news media about the correct understanding and the limitations of scientific "facts" pertaining to national policy issues. The public has to become better at drawing correct conclusions. However, the APS should balance this with the fact that a large fraction of the population neither has the ability nor the inclination to think carefully. The APS, as opposed to

individual members, would have more resources and expertise to formulate this balancing act and communicate its thinking to the membership.

The national climate has been stacked against science and scientific thinking, in my opinion because the outgoing administration has rather cynically denigrated scientific conclusions that are at odds with their agenda. To me the most pressing need facing physics is to reinstill the importance of physics -- and science more generally -- in the public, essentially as the only way we're going to be able to tackle the rather enormous challenges we will face in the coming decades.

1033411 The new website "Physics" is basically only reporting on Condensed Matter, which has limited appeal.

1040853 The newspaper put out by the APS should restrict its scope to its area of expertise, namely physics. It should not offer its opinions on political or religious issues.

1036909 The number 1 priority should be to nurture a child's curiosity for the world around him/her and prevent our educational system from extinguishing that curiosity in their march to a false accountability standard. If a child can keep his/her curiosity, you will have all the physicists, chemists, engineers, doctors, economists, etc. you need. More importantly, you will have an interesting person.

1046849 The physics community should emphasize the experimental aspect of our science and science in general, lay low on connecting too directly the failure of science education in our country with the fact that most Americans are theists, and thus have doubts of the correctness of evolutionary theory, especially when it is claimed that human evolution is a historical fact. Science is essentially an experimental enterprise and that is what we should emphasize in our science education from K -12. Experimental science, like physics, chemistry, and biology, ought to be clearly distinguished from the historical sciences, like evolutionary biology.

1047719 The Physics in education is very important for understanding the nature and everything is in used in a advanced technological society. Unfortunately here in the US the physics and Math in high schools are very low or even inexistent at all. That is not good for the future of our society.

1052270 The physics in US looks too much application-oriented. I feel the need for developing fundamental aspects.

1051350 The Physics Society should focus on Physics as their purpose and priority and NOT on Sociology.

1043523 The public at large needs to know more about what physicists do. In particular how physics can be applied in every day life. In my case this is personal. NMR was a strange effect discovered by physicists, which was then adopted by chemists to identify molecules and their environments. I did an undergraduate thesis on NMR issues. Then medicine took over NMR to convert it first to NMRI, which later became

MRI. MRI was used in me personally to discover cancer. It is only because of this tool that I am still alive today. I believe this type of human story that the media and public love to hear.

The public in general is "mystified" by physics (evidenced by the recent media coverage of stories about the LHC generating a black hole that would swallow the earth). People of all ages seem to be afraid of physics and the mathematics associated with physics. They view people with physics degrees as "freakishly" smart. We need to knock down this stereotype and make it "cool" to understand physics and math! There are NOT enough of our intelligent young people interested in physics. We need to find new ways to pique their interest and draw them in. It needs to happen at the K-12 level! Once they are out of high school we have little chance of reaching them. I know it is not politically correct to ignore diversity with respect to women and minorities in physics, but I don't think diversity is our problem. Our problem is a fundamental ignorance of the importance of a strong education in physics and mathematics for all of our youth.

1029901 The simple aim of increasing the funding for physics seems naive. It is possible that circumstances could be such that decreasing the (federal) funding for physics might put our discipline in the best position.

1047769 The society should not presume to represent all members on political matters. Many members may disagree with the politics of those running the show. As it is, the society acts like a union. It should focus on helping its members on technical matters. It should stay out of politics all together. I am enraged my APS using my news for the political goals of the leadership.

1038800 The time is well past that APS can view itself as a "pure physics" organization, dominated by fields disconnected to the monumentally important social issues of the day. If we boil over from global warming or go to war over lack of renewable energy sources, the importance of the flavor of quarks pales in comparison.

1047860 There are many needs for input from APS in areas of improved government and industrial support for physics, increased public awareness of importance of physics and its impact on American society, and improved K-12, undergraduate and graduate education, and increasing diversity and opportunities for minorities and women. The priority for support should depend on quality of the proposed program and expected benefit for the effort and funds to be expended.

1026302 There is a very fine line between politics and political correctness. My opinion is that the APS has already crossed that line, and it makes me quite uncomfortable as a physicist to see this.

1047870 These activities are very important. As a result of past activities, the physics community is very much appreciated by the public.

1037122 These are all important issues. May be, if you get more members involved in these issues, ALL issues could receive the highest level of effort and attention.

1051734 This pertains to academic research. Funding agencies such as NSF expect investigators to develop outreach and educational programs. This is somewhat difficult to do since physicists are not typically trained for such tasks. Also, I have my doubts that an individual investigator can make significant contributions beyond their other teaching, research, service obligations. I think it would be helpful if APS would provide resources in the way of information or programs to participate in that would help academic researchers fullfill NSF merit guidelines.

1031095 This questionnaire misses key issues, such as costly, but substandard annual meetings. For example, the APS March meetings are overpriced and poorly organized. There appears to be a clear priority of quantity over quality and a lot of wasteful spending by the organizers. Among many other problems, the internet connectivity and technological infrastructure at APS March meetings is poor. This makes Physics look outdated and unattractive to the public, in particular to the youth. The press coverage of APS March meeting is very small, for conferences of that size. APS press conferences at the March meeting are often poorly attended. The atmosphere at the APS March meeting is not welcoming: no/few pretty pictures, no/far-to-few chairs&tables to meet-and-discuss between the talks, no flower arrangements, no free coffee, but long lines for overpriced snacks&coffee. I guess, it is supposed to be a gathering for nerds only.

1048457 This survey seems rather poorly designed. I could not express my opinions accurately enough. Not everything is black and white or 0-5.

1043785 This year NSF does not have money to support proposals rated as EEEE (!) Where we are? But APS discusses very particular problems of small groups.

1028506 Treatment of junior and subordinate scientists. The APS statement about it is one of the main reasons I am a proud member, but more needs to be done to address widespread abuse of junior scientists if the field is to have a future.

1025674 w.r.t. nat'l sec. & def.: i think scientists have (and for a generation have had) negl. influence on policy. our efforts with policy makers may deliver little return. Perhaps should put more into analysis, such as Patel's (i think it was) on SDI. and on more public broadcast of these and other APS techn analyses of imp. issues. Maybe NPR would give APS a 1/2 hr TV slot 4 times a year.

1043381 We are being challenged by the number of technical graduates in China and to a lesser extent, India. We need to encourage pre-college and undergraduate students to major in the sciences and engineering.

1027606 We can attract more people to physics through increased funding for physics research. We should try to include people from diverse

backgrounds into the field of science to keep it vibrant and to use all of our resources. It is this diversity that has kept the US at the top productivity levels for many years. Put resources into science and they will come.

1026059 We can not stay in our ivory towers and survive. We must interact/educate the public and be involved in issues facing society.

1034896 We need to make the Physics community of mentors and professors more accessible to the public, i.e. the students and their peers who are going to be the "scientists" of tomorrow. We also need to focus on interdisciplinary programs that would rejuvenate the field and attract young minds. This initiative will also serve us well to garner additional funding resources from alternate federal agencies like the NIH, NCI etc. There is a whole lot out there that is exciting and happening and we physicists must find ourselves in the middle of that and contribute ably to those efforts. Thank you.

1028516 We ought to re-evaluate the approach to outreach, perhaps scrapping every program in existence. There's an implicit assumption in much of it that people who don't know much physics still approach the world the way we do, except they just haven't slogged their way through physics problem sets and so forth. But the lesson that George Lakoff, for example has been teaching us, is that the notion that people will give up irrational beliefs when presented with solid evidence is itself an irrational belief, unsupported by the evidence. Physics outreach needs to be designed by communication specialists, and physicists need to be prepared to accept that their physics intuition gives the wrong answers when questions of effective communication with non-physicists come up.

1031934 We seem to be in an age where public and political sentiment for science is waning, and the way to measure that is funding. So all the other priorities are connected to funding. But this is not principally selfishness. Rather, countries that are devoted to science seem to be improving economically in a sustainable way. We, sigh, have ours booms and busts.

1041965 We should focus on contributing to the public debate where we add value and our physics background gives us a unique insights. We should not get involved where we don't have unique insights. Not all issues the APS has addressed in the recent past would meet this test.

1042017 We should try to show Washington (with concrete examples) how APS is helping with US competitiveness in terms of helping primary school science education, increased technical innovation, addressing technological challenges (energy research), and economic growth. These need to be shown as a complete package and not separate activities that lawmakers can "pick and choose" from

1049014 Who else but APS can champion these priorities?

1047759 With Energy and the Environment playing significant roles in government policies APS should make every effort to educate our policy makers and the public.

1034179 With the decreasing number of students entering physics and science in general, especially in the US, I would like to see a 2-tier approach...bottom-up and top-down. More should be invested on K-12 initially to increase the number of students, but at the same time investing in developing the skills of undergrad and grad students to make sure they can succeed. This is especially true for women and minorities where there is a growing pool of talent to draw from.

1031146 Work on government funded daycare and nanny services similar to public schools which promotes a higher success for women to continue in this field. Work more on diversity and cultural awareness of various countries to promote greater cooperation among physicists from diverse backgrounds, which is seriously lacking so far.

1046304 Would be good if APS could help the fight against primitive superstitions which are so prevalent in our modern societies, and make the world a much more dangerous place than it needs to be. Physicists and scientists in general should be responsible for educating the public at large, starting with the basics of scientific methods.

1040378 You are the public face of the physics community and as such a coherent effort to represent the physics community and the physics they pursue to the funding agencies and the wider public should be top priority. It seems to me that the APS and physics in general could do more to make some of the excitement in physics accessible to the wider public. Do more to stop the continuous march of ignorance in our society. Robert Park does some of this, and does it well, but for physicists, not as much for the general public. A more friendly, outward, person who could take on public ignorance (as in, a black hole from LHC swallowing the earth, Creationism or Intelligent Design etc) and do so without antagonizing people but instead educating them... Probably start in high schools... Maybe I am being too optimistic. Thanks for the survey.

1054454 You have to make kids and high school students more interested in math and classical physics and should not allow them to be discouraged by teaching them some new theory that is yet to be proven (over a long period) and is very difficult to comprehend and imagine.

1054565 You should act as advocates for government agencies that fund physics research. Please do not just focus on NSF, DOE, NIST.

1055920 You should indicate home many questions there will be in the survey. I didn't have time to finish, so I simply gave no opinion. If I knew what to expect time wise, I'd have started it when I had the time consider each question thoroughly.

1047486 Your educational and professional development priorities should include advice for physicists whose time spent as students is "broken up" by work...that is, how people who have needed to work full time between BS and MS, or MS and PhD degrees can sharpen their skills so that additional education can be learned as job priorities shift.

1043088 Your priority questions were all "motherhood" statements.

Your survey wording is too restrictive, and conceals many false assumptions. The society should be promoting/ facilitating the conduct of quality physics research activity, and the support of the people most capable of conducting it, without regard to extraneous factors. The APS should also work to assure that physics is applied in positive ways rather than destructive ways. The profession needs the equivalent of the medical Hippocratic oath. The Society needs to do a much better job of educating the public (including the bulk of industry) about the central role that scientific research successes have played in advancing the overall standard of living. At present, the branch of gov't that has the best-developed technology research program is the military, with the result that the most destructive applications of new discoveries are well-funded and given priority, but benign applications are left to the random vagaries of the market and too frequently not pursued at all. This has led to an "imbalance of effect" of physics research that has seriously restricted the delivered positive benefit of our heavy investment in physics research to the community at large. Through their overly-eager and ill-considered development of nuclear weapons, physicists have given several national governments the technical capability to destroy most or all human life on the planet. This does not speak highly for the wisdom of our profession. If we do not do a much more proficient job of educating the public on the potential positive significance of physics, and of re-orienting its principal applications away from weaponry, and its funding sources away from the military, we risk being reduced in the public mind to a society of dangerous amoral oddballs consumed by technical curiosity who need to be de-clawed and perhaps reluctantly supported only as a purely cultural activity, perhaps at the same funding level as opera.

Question 9: Verbatim comments on priorities that the APS should give to public affairs, education, or outreach issues.

International Junior Members

1079643 Always focus on the research and avenues that allow for better and more research to be done. Human rights / political issues already have many dedicated organizations for their cause. APS should remain physics focused.

1079582 stop MANTIS checks.

1079956 We live in a world that is controlled by the level of science and technology and physics is the bedrock for them. The public needs to be aware of this importance and this could encourage enrollment in physics as well as funding as the public (young people, parents, lawmakers, etc) will come to realize the need to do so.

1079219 What about outreach to international students to study physics at American universities, at all degree levels? This will certainly mitigate some of the difficulties faced in the K12 system.

Question 9: Comments on priorities that the APS should give to public affairs, education, or outreach issues.

International Regular Members

1067903 The APS should oppose vast and wasteful military programs, with information and technical explanations. Spread information about the latest educational techniques, including textbooks, computer simulations, and interactive courses.

1067731 1. Pick your battles. Don't tackle hopeless problems just because they are politically correct today. 2. Promote humility. Physicists know a lot about Physics, but tend to be incredibly naive about people and politics. We need to educate ourselves before we start explaining the world to others. 3. Start at the origin. Graduate education will take care of itself. Undergraduate education will be what we make it. K-12 education will be only as good as the understanding of those who teach it and no schools will prosper until the public's awareness is revived. We need a campaign to "Talk about Physics to your Neighbor!" The public hates condescending "scholars", with good reason.

1071201 A large organization such as APS should concentrate on questions, where the status and the size of the physics community can make a difference. I think the climate change belongs to this category and it's not a shame, if the present concern turns out to be wrong later in the future.

1067115 A significant amount of effort should be given to educate people in physics. Also, it's very important to make aware the decision making bodies that physics is essential and the research and education should be promoted by granting more funds.

1074739 Actually I find the APS very US-centered. I am not resident in the US, but have an interest in attending North American conferences most years. The APS interest in lobbying US congress for more US physics funding is not of interest to me at all, but giving me ideas for better physics outreach to schools is of high interest. Try to think about the rest of the world occasionally! None of the minority / women speakers programs are relevant outside the US either.

1076276 Actually, since I am resident in New Zealand (University of Auckland, Physics Department) I do not receive the direct benefits of the APS programs.

1072525 All issues I indicated on previous pages

1073445 Also, APS should help in delivering high quality animations of the world famous standard books on physics to the faculty members of the universities/colleges of developing/undeveloped countries so as to popularize Physics.

1076680 Analyze the workplace environment of graduate students and postdocs. Analyze how many physicists a society should have

1074547 APS is doing a good job!

1068752 APS should also work to make revolutionary ideas in the field easier to introduce. One often hears that if Einstein were alive today, he'd have died in obscurity. We need an outlet for these kinds of ideas with a strong filter of course to weed out the pure crackpots.

1063787 APS should continue and expand its efforts to publicize and fight barriers that the US government is putting up for travel and research by minority and foreign physicists. Bush is almost gone, but the systematic racial discrimination by many government bodies remains strong. As an APS member, I have been a victim many times.

1061321 APS should focus on improving physics teaching at all levels. For this purpose, lobbying for money that reaches schools and universities (rather than "big science") is essential.

1072414 APS should give priority to popularize Physics Education at the root level of society.

1073910 APS should give the highest priority in promoting physics, and setting the higher standard for physics research. It also have the difficult mandate to bridge the knowledge acquired by physicists to the society. I have the perception that society has outranked physics (with respect to 100 years ago). In a society dominated by media, nowadays it is not important what is communicated to people. The only thing that matter is to keep speaking: look the example of LHC. The week that preceded the first beam run has seen all news saying that in CERN there will be an experiment which can potentially create black holes which might swallow the Earth! The day after the 10th September (the day of the beam run) nobody cared no more. But everybody remained with a lot of misinformation in their heads.

1071857 APS should have more interactions with similar societies in other countries in order to facilitate any priority issues described above, because there are issues that individual members can only have limited contributions.

1076872 APS should reach out to mainstream students. With our limited resources, we should focus on general student population.

1077520 APS should try to improve public perception of science (Physics in particular) and provide more opportunities for international co-operation.

1065092 As a British member of the APS, based in the UK - I am linked into many of the outreach and diversity programs here. BUT limited information has reached me about APS programs. Is there a chance of making real international links - joint lobbying, outreach, diversity programs? I am a chair of one regional branch of the Institute of Physics

(IOP) in the UK - wgp1000@cam.ac.uk - feel free to contact and I will forward to the appropriate person. Thanks!!!!

1063000 As a European member of APS, many of the possible concerns have a different context or perspective. The APS happens to be the largest collective of physicists. If there would be a World PS, I would be a member there.

As a foreign subscriber not currently working in the physics community I am, perhaps, less likely to grade US politics-science interaction as highly as an America based scientist. However, I think the key to a fully supported, effective and respected scientific community is public education, including members of the press. This in a world dominated by the sound bite and celebrities. Separately, education, especially of children, has always been and will continue to be the most important driver of good in society - equality and quality must be the goals.

1064667 As a professor of Theoretical Physics in Prague I certainly gave somewhat atypical answers for both my reasons for being in APS and for priorities...

1064687 As an APS member in the UK, I note that the thrust of your questions is towards members of APS resident in the US. Perhaps that was your intention. In any case, national societies (I am a Fellow of the UK Institute of Physics) should be playing a more aggressive role in educating policy makers in Government. I commend the efforts of the APS in this regard but could be more vocal..

1038274 As an assistant professor, I can honestly say that all other efforts (K-12 education, outreach, developing nations, etc.) are secondary compared to my ability to obtain funding. therefore the ability to increase the federal government's investment in science is the highest priority, by a factor of many, many orders of magnitude. I will NOT be able to inspire young students, teach future physics teachers, or anything else, if I cannot secure my job position with a vigorous externally funded program. The precipitous decline in funding is the single greatest issue we face. Everything else is just window dressing.

1077994 Awareness of developments outside the US should remain a point of attention

1060572 Be very outspoken against arms issues, which would take up a lot of public funds, alienate other countries and are most unlikely to yield the promised benefits (e.g. The US Missile Defense), even though they might offer employment for physics graduates. Defend the use of nuclear power by providing viable solutions to the problems of nuclear waste disposal, which are acceptable to the public (educate the public on subject).

1068136 Being a Canadian, living in Canada, I admittedly have a somewhat limited picture on the influence of what internal priorities might have on national (US) issues. By the importance of the APS though,

the decisions made by the Society have an impact far beyond the territorial frontiers of the USA (like for the financial markets!).

1072151 Considering the level of ignorance of the public in physics issues, the APS should enhance its activities in outreach matters as well as motivate the universities/colleges to show progress in this direction.

1037213 Continue and improve efforts to: educate children in physics, lobby for new energy programs & research, promote political awareness of the need for basic physics R&D (SSC project?), communicate to our lawmakers our desire for peaceful progress and the improvement of international cooperation in all fields of physics.

1065850 Continue to emphasize the importance of basic research

1061361 Different stupidities about minorities, women, etc are also infiltrated in physics

1064384 educate proper scientific publications, thus support critical reviews, even if they act against main stream opinion (but only as long as justified). We have too many papers/year, and reviews often accept bogus papers. Due to this incredible amount of papers/year, no single organization can clean this mess up!

1063464 Educate the public about science, promote rational thinking, debunk superstition.

1068803 Education should be given high priority. All sectors of the Physics community can benefit from the influx of quality (not quantity), well-trained and highly motivated young people.

1074941 Education should come first as, without an informed public, the others fail. Unbiased comment on scientific matters affecting public affairs comes second. It raises awareness of APS and limits excesses. Outreach has a shifting target. It will always be needed but to a changing extent.

1062544 Education, as broad as possible, should be borne in mind in the context of discussing public affairs, and should be the target of outreach activities. In the end, education should have the chance of becoming the starting point for taking decisions.

1060229 Education: to tell students that it is important in physics to measure a quantity and to make novel experiments (or models or theories) and not only looking to nice ppt-pictures

1073192 ethics and awareness

1069995 Ever thought of having a quarterly 'best of physics today' for sale publicly, i.e. without having to subscribe? Some of the articles are very nice and well written, on a level somewhat higher than typical popsci magazines (ie. SciAm, NewScientist, Discover etc) and might be of broader interest.

1063696 Facilitate the access of foreign scientist to USA universities

1073394 Favor the connections between theoretical and applied science

1072828 For APS to consider involving more diverse selection of international researchers and scientists (including the new generation physicists) in executive and organizational capacities. Also, the awards offered are to be more open to the diverse international physics community, rather than to known universities and centers

1073243 Foster cooperation of APS with other physical societies in the world.

1065507 further promote the application of physical approaches beyond the classical fields, e.g. in biology and clinical research, economy, sociology and politics.

1063232 Generally appears to be well managed programs.

Get the politics out of APS and concentrate on physics. It is 1029395 disheartening to see the APS endorse junk science such as global warming. We also have no business pushing for ``diversity''. There are no barriers to women and minorities in science. The reason there are not more of them is that physics is a relatively unrewarding career for the amount of effort and ability it requires, and qualified women and minorities can make a LOT more money for considerably less effort in other professions. The career structure is also not congenial to having children --- no secure job until one's mid 30's, so women who wish families are always going to be reluctant to choose physics. And certain minority cultures stigmatize people who study physics. We ought to --- and we do --- welcome anyone who wants to participate, but we are not doing them any favor by suckering them into this field. Finally, our efforts in education have been appalling and should be stopped. The best thing that could be done for education in physics would be to reprint the old 60's texts and use them for introductory material. And the rate limiting step at the undergraduate level is not high school science education but rather the lack of mastery of high school algebra. It is also disconcerting to see our side in the evolution vs creationism debate supporting the antiscientific position that evolution needs to be taught as a religion, without understanding how scientists evaluate evidence and reach conclusions. If the Christians really WANT creationism taught as a scientific theory we ought to WELCOME that and turn it into a learning activity about how science is done. Instead we are demanding that the view of our biology colleagues be taught as a religion.

1078773 Get us on prime time national TV!

1075336 Helping public to understand physics and how physicists think, as well as showing them physics is fun [which is also very important].

1074234 High priority for the socio-economical impact of physics education and research.

1066578 I am back to Europe and my contact with the every day life in the USA physics is reduced.

1074446 I am concerned about the large fraction of the population that denies evolution. That's a biology issue, but I think the same ignorance or rejection of science shows up in physics issues like global warming. I don't know what can be done about it, but I would encourage APS to engage school children and the public where they can. Not so much about specific issues but about how science works and how scientists think.

1061705 I am currently living in Canada and therefore do not have indepth knowledge of the K-12 program. That is why I did not give my opinion on this issue.

1072515 I am from Germany and I assume, lot of other people around the world would be interested in APS, its journals, getting in touch with the people etc... So being open for people from other countries is a great value for me.

1077368 I am surprised that you did not have a question: What priority should APS have for promotion and cultivation of knowledge about the physical universe. For me that is the highest priority.

1078501 I answer from the European side. Education has the highest priority for me.

1063212 I apologize for not having opinions on the issues listed above. I am not living in the U.S. (and am not American) and therefore don't have any first hand experience of the needs of the U.S. scientific community.

1069753 I appreciate the APS efforts very much.

1061270 I believe that the APS needs to strive more to increase government (as well as private) funding for Physics research and to improve the public perception of Physics as a vital area.

1072383 I believe the magnitude of the global warming issue is the product of poor design, installation and commissioning of mechanical systems. We must bring awareness to the people who live where the "rubber hits the road" so to speak. I do not see an effort to promote applied physics at the social level where it will actually improve our probability of survival on this planet.

1077641 I don't know if I have another place to write this, but as an APS Fellow who worked for many years in the USA, but has now been in another developed country (Australia) for 9 years, many APS services are inadequate. For instance Physics Today takes 4-5 months to get here (whereas Science magazine comes within a week) - I would love for us to advertise in Physics Today, but it is absolutely useless for us - we typically receive it long after the job advertisements have closed! Also for many active physicists, the APS is really a global society, but it is focused on domestic business and to a lesser extent developing countries. We might want to think differently in the age of globalization.

- 1062857 I don't see APS as having a role in forming graduate and undergraduate education. These are important topics, but I believe that it is the universities which need to take the lead.
- 1064031 I guess, APS has to work on improvement of international cooperation and exchange of ideas and results. Also, I guess, the APS has to help APS members in their contacts with Patent service.
- 1077883 I have missed among your activities activities against "creationism" and other religious nonsense!
- 1071877 I have the impression that the activity is too dispersed. It is worth concentrating on few major issues and drop the irrelevant, to achieve good progress. This is what I normally do.
- 1070523 I hope APS would engage physicists not residing in America more. It's difficult for physicists outside of Western countries to contribute meaningfully to science because their works, apart from rare definitive discoveries, are largely ignored.
- 1067963 I hope I can email my thoughts and opinions whenever I have a reasonably strong opinion on any.
- 1066023 I live and work in Italy, thus my knowledge of some aspects related to internal US policy, teaching or funding is limited.
- 1075588 I live in Israel, so the outstanding issues in the USA are less relevant to me
- 1076206 I recognize that the APS activity for public affairs, etc. are already excellent. If I may add, since the APS have a high skill to design a good website, it would be wonderful if the website is augmented for non-specialists, say for example, with encyclopedia or fun stuffs to improve the knowledge in physics.
- 1073203 I think Physics as a whole should give importance to creating awareness about saving energy not using things like plastic bags indiscriminately and not wasting food.
- 1074577 I think that APS, may be through joint program with similar foreign society should become more an international player or lobby (coordinating pressure on various governments simultaneously)
- 1061543 I think that outreach activities to general public, school teachers, and K-12 children in particular, are most important, so that more people may understand basic scientific knowledge helps to make important decisions in politics, economy, etc.
- 1061876 I think that promoting new area is one of the most important effort which APS should work on to keep vital future of this community.
- 1060401 I think the APS has done a great job in its public affairs, education and outreach issues, and has targeted them appropriately. You can always improve of course, but it's mostly a matter of remaining on the

right track. This easily said than done, but I trust there will be no problem with the right people in command.

1072545 I think the most important priority that the APS should give is the exchange between its members.

1064233 I think we need to educate young people to seriously consider this huge consumption of energy, and material that would definitely is gone in the future. We must teach materials are never mined infinitely.

1068863 I would like to wish more freedom in physics, for all physicists.

1070513 I'd like APS should support more the applications of physics to health problems, like cancer treatments, etc.

1065709 I'm not sure if this is the right place to mention it, but I'm astounded that the APS does not play an oversight role in accrediting Physics Education at universities and colleges in the US. For example, the Australian Institute of Physics does this both domestically and internationally - the APS surely would be even better placed!

1072848 I, as a foreigner, welcomed the meeting of APS as a nice opportunity to learn the future trend of the researches. However, as a foreigner also, I don't have any specific opinion about those referred subjects.

1060491 If we do not improve math and science education at an early stage, all other goals will be greatly hindered.

1069541 improve contacts and awareness about other nations' physicist organizations on equal terms - the APS is a high-profile organization for us physicists, but the US is one of many countries. Think of Japan, Europe, but also smaller countries world-wide.

1066932 Improving K-12 science education should be the highest priority for everyone. Integrating physics into every student's science foundation will have long lasting effects. I applaud the APS for making this one of their top priorities.

1065254 in summary, i think APS is doing a good job as it is.

1075871 In the USA there is a significant retreat from reason when it comes to matters of science in both the teaching and policy making. It would be good to see the APS take a strong stand on the promotion of scientific reasoning in major decision making processes.

1067650 Increase an APS contribution internationally to improve awareness of public in the world to the importance of physics and physics education (esp in view of deteriorating infrastructure everywhere incl the USA)

- 1073061 Increase the funds for fundamental physics. Improve the international cooperation More effort on the climate change More effort on new energy
- 1070371 Interest in physics to people as young as possible.
- 1070381 international collaborations and opportunities for research sponsorship in developing countries
- 1066740 International collaborative activities such as joint research, symposia and the development of educational programs between US and non-US institutions need APS's moral or financial support.
- 1062978 It could be something good to improve the communication between APS and foreign members like me. Specially people from countries like mine that do not have relations with USA. I would like to receive better the publications (Physics Today and APS News). In present time I receive them with delay.
- 1061179 It is dangerous to get mixed up with politics and lobby activities as it might backfire.
- 1076327 It is of paramount importance to spread the joy and understanding of physics to the public. Also people should understand the way of thinking in physics is getting more and more important in the current world of serious global problems such as global warming, need of new generation of energies etc...
- 1074456 It was difficult for me to answer all questions, because some items were related to national policy (i.e. in the USA), while I live and work in western Europe (in France)
- 1062089 It would be important to bring back the prestige of physics in society in general, not only by itself, but as a valid way of thinking the world. Do something to attract a larger number of high school students to the exact sciences.
- 1066396 Keep one foot on the high pedestal because we need people who do it. Take the other foot off the pedestal and lobby, influence K-12 education politically. I think APS has both kinds of members. Making about kinds flourish is a challenge for us.
- 1077893 Main point is to be above politics. Inform, educate, don't debate narrow interests. I've given low priority to lobbying activities on the previous forms. Basically, I regard it unseemly for us to be seen by the public to be acting as an interest group. We are better off addressing the position of physics and science in the culture, then funding and such things will take care of themselves.
- 1060097 Make sure that efforts to promote science as a cultural international activity aimed at gaining insights and understanding are coherent with the similar efforts in humanities and social sciences, so that policy makers do not reduce science to pure technology, and so that we can fight together to maintain and protect academic standards.

1073536 make the people to realize how importance the physics is in the development of society, in life and in science.

1071796 Many members of APS are not in the USA and would welcome a more international outlook.

1068681 more a vague idea: how about starting joint activities with professional physicist organizations in other countries on issues like public science education, human rights or help for developing countries?

1078208 more focus on research and its funding! less emphasis on public relations!

1077570 More outreach programs for Physicists from developing countries.

1071998 My opinion is that there are four priorities of the utmost importance. One of them is to communicate with society (not specifically and solely policy makers), and for that the education of people is essential and should improve. The second issue is the position of women, more specifically regarding the very low percentage in command posts and highest level awards. Maybe, the most important one is no involvement with any military or arms research. And finally, work in the direction of maintaining and improving public funding for scientific research independence and survival of fundamental science with independence of industry and private foundation interests.

1074618 My priority would be to promote public understanding and enthusaism for science in the USA

1072535 New Energy Technologies as Research priority Target

1069602 No Comments. GOOD LUCK!!!

1077590 Not being a US citizen, I often feel like an outsider in this association, which I am, of course. But then I should not have joined APS in the first place. I wish there were more texts aimed at the world Physics community, rather than just the US one, texts that would be explicitly international. But this is only a very minor concern in fact, I am quite satisfied with the way it is.

1072212 Now APS should evolve policy on global basis. The APS global role beyond the territory of America is the cry of this hour. I beleive in it and sooner APS realizes it the physics world will change dramatically, precisely and quickly.

1076226 On the public education front the APS and the professional organizations representing the other STEM disciplines have to act coherently.

1078066 One organization can't do everything. So I suggest there is tremendous physics illiteracy in the general public and among students of

all ages. We certainly have the world's expertise in this area so let's try to do what we can to fix this problem.

1066548 outreach is important

1078783 Outreach issues should receive great attention. People don't know about physics bcs. This activity it is not considered as relevant by the community. Education is another area of great relevance.

1061159 Perhaps those who have been elected as fellows of the APS should, as leading figures in the community, be required to be more actively involved with these activities.

1073889 Personally, I would prefer the APS to steer away from highly politically charged issues and focus on more fundamental issues, where the science is clear, as a professional society should. Education and outreach should be high priorities. Simply put, the significant reduction in physics and physics-related programs and the substantial "dumbing down" of physics curricula that I have observed in the last 15 years is troubling. I hope that the APS can continue to be an advocate for rigorous programs and redouble its efforts to ensure that science (particularly physics) remains an essential part of any well-rounded liberal arts or engineering education. Similarly, I see the APS as a powerful force for improving the scientific literacy of the general public, and thus, its outreach activities are very important. Resources such as this are key to having a functioning democratic society.

1065880 Physicists=Einstein is a bad image. Everybody can be a physicist not only the "brightest". Physics=big bang (according to the press) is a bad image where very recent advances in physics are all around us. Physicists, particularly at graduate and postdoctoral levels, and professors of physics are poorly paid (very poorly paid). APS should show more technological achievements by physicists, not only the scientific ones.

1060956 Physics and public : energy and environmental issues (nuclear versus renewable energy sources)

1073596 physics education is fundamental for the technological and scientific development within a nation

1062281 Physics is needed! This is and should be reflected in the activity of APS. However, it is impossible to have a focus on many targets. Focus on the real mission and stop the efforts for earning "political points".

1076135 Physics is not neutral. The anti-reagan starwars report was a prime example of how scientists can intervene in up beat dangerous pipe dreams. The "heaven war" against obsurantism and religious madness (in the US much worse than in Europe) is also such an issue. Understanding nature enables us to improve society.

1066427 Please consider in these issues also foreign nationals and (other) members living overseas.

- 1067478 Please keep the activity of the APS.
- 1077792 Please revive the paper version of Physical Review because reading PDF is not so comfortable.
- 1072323 Promote / facilitate international teacher exchanges between the US & other countries.
- 1074709 Promote free access journals in physics.
- 1068479 Promote initiatives that make the public aware about the approach of Physics to the understanding of natural phenomena promote rational thinking among the general public.
- 1074678 Promote more international collaborations.
- 1077247 Promotion of APS meetings is one of the most important issues of the society.
- 1074830 Public education, response to creationist propaganda or legislation should be made more visible. Widest possible coverage of (future) energy and environmental issues, not just narrow CO2 & global warming focus.
- 1070907 Responsible Editorial Boards for APS Section News are urgently needed. I.e. the APS New England Section is printing and mailing out Newsletter, which deny human-made climate change. Make APS Sections more accountable, so that they are not used to work against the APS at large.
- 1071423 See Bob Parks. I very much agree with almost all his concerns, especially concerning education.
- 1073354 Since I work in India, I am not sure I can give you very specific inputs on this. But certainly it is important, both in the US and in India, to continue lobbying for funds for physics research (including basic physics), to make every effort to ensure that women choose physics as a career (and then stay in physics), and to make physics appealing to students in school.
- 1066508 Since you already listed a lot of important topics, I don't think I have more to say.
- 1074052 Some priorities I have set as average, not because the point is not important, but rather because I don't see APS in a real position to make a difference. APS counts a large number of foreign members such as myself, but there is no committee or body that I know which could advise APS on their priorities or problems or view on problems. I am well aware of the efforts of APS to help scientists in poorer countries, but there are also those of not so poor countries! Have a nice day
- 1060542 Spreading of science (the discoveries for life improvement and its methods) towards the large public at the national and international levels is a very important task against any fundamentalist temptation. International cooperation, equal opportunities in scientific development and career access, improved scientific education, and ethic behavior have

to be sustained. I think APS is doing a good job and hope it will continue in the future. Thank you

1077904 Stick to the physics. The politics will take care of itself. I see a regretable tendency for political concerns and fashions to corrupt the integrity of the physics community. This is especially true with environmental issues where special interest groups seem to vet the content of articles that appear in Physics Today. This must stop.

1073132 Students are turned off by Physics even at the high school level. The content of physics at that level seems "ancient", studies a boring clockwork universe, and the process to get to the frontiers of physics, with a mountain of mathematics to scale, seems daunting. However, students appear to be excited about life sciences and chemistry which they seem to be able to grasp more readily, maybe because they are more descriptive, colorful and relevant at that level. In competition with these other disciplines, physics seems to lose out in capturing their imagination and time. How do we replenish the pipeline?

1077530 Support physics per se and not so many social, ethical, military, and political issues.

1066346 support science at the possible highest level, be critical of ethical failures in the administration and development of science, be critical with the parasites in science.

1060976 Taken altogether, you are doing very good jobs (compared with similar physics society in my home country), but I hope that you improve your efforts more on these issues.

1078420 Thank you.

1078612 The APS has my fullest support and makes an invaluable contribution to physics and further adds to the richness of the scientific culture in society in the broadest sense.

1078258 The APS is a US-centric organization, but is nevertheless open to international input which is appreciated. The APS does a good job of lobbying the US govt, this is helpful in influencing non-US governments to support science as well.

1062190 The APS should also pay attention to the apparently increasing hostility towards science by more fundamentalist religious groups.

1062130 The APS should make much of physics educations and the development of foundations of physics.

1078400 The APS should show a leadership in solving the global issues such as energy, climate, and food as well as in education and R & D.

1069349 the international cooperation in plasma physics research

1076094 The level of science education in the general public is a very serious concern -- other items listed in this survey, e.g., informing

governmental personnel about the needs of our field really have to flow out of a public perception that the work of Physics is valuable to society

1075578 The main activity should be the promotion of all areas of physics, physics research, physics education and the communication of physics among its members and the public at large.

1076802 The main strategic goal of the Institute should in my opinion be increasing the awareness of the public and the political establishment to the value of science in general and physics in particular -- and (at least) making life a bit more difficult for those politicians who exploit the appalling ignorance of the electorate. The other programs are also very important but I would put at one notch lower priority.

1076488 The most important education issue is to teach critical thinking. People who can see through "spin" are critical to our success, whether or not they know physics, per se.

1074729 the present action of the APS in France is excellent

1067317 The present questionnaire is a good initiative. After the results we should be more clear about the future. You should take into account members that are Americans not from the USA, after all America is a huge continent. I am not aware of any initiative concerning the use of Spanish in the APS, even in the USA it is an important community.

1052785 The priorities of the APS should be data driven. For example, I suggested dropping any efforts for improving graduate education, not because graduate is no important but because I haven't seen any data that says there is a problem. I could be wrong of course but then the data should be clearly published by the APS in the context of justifying it priorities. (if it is on the APS website, I couldn't find it). I would like to see much more effort related to public education in pseudoscience – expanding on Robert Parks considerable effort. He is, after all, just one person. Doing a google search on any area of pseudoscience has never found a link to the APS Website, that's really a major deficiency. We can't expect more than a small fraction of people to go into science but we should expect all persons to be educated in the fundamentals of science just as we expect them to be educated in math and reading.

1066184 The scientific method should be taught to children, disrespect to gender, at very early age.

1070078 The world is lacking resources and governmental support for basic research and development. This is apparent, especially in the USA and the UK, where political considerations will make authorities sacrifice basic research for the political expediency and political gain. Physics must be supported fully by all involved in the field to educate the public and the authorities and law makers of its vital importance.

1061846 There should be an increasing role of APS in the K-12 schools, in order to have more children and young people interested in science, and in physics, in particular.

1074082 This does not apply to me, I don't live in the US

1077378 This is slightly off the point, but: I do not understand that regular, long time members like myself have no access to Physics Today online, not even older issues, without paying extra.

1064354 To give a possibility to foreign members of the APS to take part in APS meetings at least sometimes. For instance, I would be happy to present my results.

1074254 To my experience the most important aspect of getting the support (or at least understanding) of the legislators is NOT to try to convince them that the research TOPICS are highly relevant for the public but the EDUCATION THROUGH INVOLVMENT IN RESEARCH is the highest of most effective return, even on short term, on tax-payers money, invested in basic research.

1073233 To my point of view, an important issue is to convince the media to promote a better image of physics and science in general. The impression that people get by the media is that people's value is only money. Let us try to change this opinion by showing more exciting scientific programs that let the younger generation admire and identify with the people who make the discoveries that will design the world of tomorrow. With today's problem of obvious "virtual money" affecting the stock market it might be a good time to do so!

1064506 To promote Science in general and Physics in particular at all levels, including public affairs, education, and outreach issues is a primary need for the survival of Science and its further development.

1067973 We must be vigilant in ensuring that all children become well versed in the scientific method, and convinced of the value of science to explore and assist the aspirations of civilization. The public and our politicians must be informed as to the pressing need for basic science in elevating the condition of the human race, and prepared to support and fund it. Physics is an immense treasure, and we ourselves should endeavor to vigorously spread the knowledge of its benefits to non-physicists, and to expand the concept so that people, rather than feeling it is some remote discipline conducted in labs, recognize the great value of it and personally feel enfranchised by it.

1076468 We need more people like Carl Sagen who can really inspire imagination of general public. APS could help to identify these people and promote their public speech. These efforts might be more useful than some direct lobbying for congressional support.

1078107 We should ask famous physicists (like Nobelists) to make even more efforts in this direction.

1078197 We should be honest about what physicists can achieve in doing physics. Overselling what we can do to the general public is a bad idea. We should be careful about not doing so.

1062635 We should speak, act and react on all issues relating to the role of physics in developing our society. If we fail, who will speak for

us? Value to society comes first; funding will come as a consequence. Our young at schools are most important.

1071483 when I say that "national missile defense" should be highest priority, I mean that highest priority should be given to making sure the decision makers know exactly what is and is not technologically possible -- the absolute last thing the US needs is a "faith based" missile defense.

1066336 Whereas the cooperation in science between the US and Europe is on a good level, me, as an foreign member of APS and an University teacher would appreciate a more extensive support of APS to international cooperation of US institutions and Universities with e.g. European teaching institutions in exchanging the methods, forms and experience in teaching, which is not adequate at present. The publication in American "currented" journals on teaching by authors in Europe is then difficult, sometimes seemingly impossible. So, the Journal, equivalent of European J. Phys., organized by APS would be very valuable.

Who will help the American citizens (~35%) who feel marginalized by science as a sophistication, manipulated and repeatedly made fearful by politicians to cling to an identity of ordinary-Americanness that excludes science? We do need an effort, not just to "inform the public about the importance of physics", but for well-trained scientists and people in this situation to work with each other as fellow citizens of the country and planet. Responsibility for experimenting and learning how to do this lies with us, who have had the privilege of being taught how to keep learning. Third-person pronouns and condescension are the barriers in this effort. Extremes of careerism -rules to be followed for survival that do not come naturally -are causing mental health loads in the scientific community which are acknowledged, but not taken seriously enough. An effort to make our work lead to more direct connections and affirmation from the rest of society should help. The two issues are related. APS can take the lead in transforming outreach -from "lets show you why Physics is fun, exciting, cool and useful" to "What can physicists and scientists do better to help share life on this planet?" -and listen hard for answers -we may learn something.

1067791 work towards lower tuition in science education. Lobby for long-term, predictable research funding opportunities in contrast to just short term grants, and support for truely fundamental research

1078703 You are doing a good job.

1075083 You should initiate an "European Physical Society" similar to the APS. Currently, there is no real European organization which can match the APS (and that is one reason for me to remain member of the APS) - things are split up into national organizations. You should have enough European members to pursue such an effort. Out of different reasons e.g. the German DPG is very "harmless" if it comes to push physics in Germany, probably due to its organizational status, which prevents it from any political activity.

1067367 You should require ranking of priorities rather than absolute values.

Question 27: Comments on their affiliation, the benefits they receive, APS programs, etc.

US-resident Junior Members

1059782 I tell you what would be useful in the news and current events category. I have always been interested in gravitational wave observatories. But I don't have the time to keep up to date on new technologies or discoveries. Instead of getting APS emails asking me to vote for an office I've never heard of with candidates I don't know, I'd like to get an email every time a new publication comes out in the field of gravitational waves.

1057619 I think that the discounted membership dues for postdocs should continue (within reason) until the individual finds a permanent position. The current cut-off time of three years after the Ph.D., after which one is forced to become a full member, is not long enough in today's job market.

1057699 I think the articles in Physics Today are too technical and technology oriented. It would be nice to have more articles like what you would find in Nature or New Scientist, because I am reading it to find out what is happening outside my particular field of expertise.

1057174 Physics Today is very useful to extent my interests

1058064 The physics community is a nice place.

Question 27: Comments on their affiliation, the benefits they receive, APS programs, etc.

US-resident Regular Members

1029769 APS Journals, Contributing papers and participations at the APS meetings

1038668 Our University has e-journal subscriptions to all APS journals..so in past having journals at reduced cost was a benefit, but no longer.

1026746 All in all, I perceive APS membership as a lost opportunity. I see at the APS bunch of people interested in granting each other kudos and awards, and doing little for working physicists. The fees charged to access scholarly articles make the publications unaffordable to the independent physicist. I find the IEEE membership incomparably more rewarding for instance, the IEEE Press reprints updated editions of engineering and physics classic textbooks and treatises. The IEEE download fees, although high, are lower than the APS download fees.

1035827 Although I've been a member of the APS for many years, a career change more than 16 years ago from basic experimental physics to health/medical physics leads me to question my ongoing affiliation with APS. I've always renewed my membership but have also always questioned my commitment. I'm not sure that I really get that much out of my membership, and it's somewhat of a mystery to me why I keep it up.

1048851 Although my PhD is in physics, I think that the IEEE serves me better. I also belong to the Materials Research Society and the Electrochemical Society, both of which serve me as well as does the APS.

1054373 APS FYI is a great service.

1021226 APS is a business. It needs to grow to survive. Healthy growth cannot occur in the US without US BORN membership. Your efforts to whine for more funding can never compete with the MASSIVE over supply of graduates produced. American standards of ethics (and decency) will not tolerate the bread & water existence (or is that MELAMINE?) expected from members of the science community. "Birth control" and a virtual exclusion of foreign born members is the only way to create a healthy society. You don't have the discipline to face the real problem facing the society (all humankind, really): overpopulation. My condolences.

1034270 APS is a good professional society which I would like to recommend other colleagues and students to join.

1025290 APS is a very positive force advancing the public's understanding of science, science education, and the field of physics. I'm impressed with the high quality, skill, effectiveness, and commitment of its leadership, and proud to be associated with it.

1036464 APS is an excellent forum to interact in the scientific community. APS should actively lobby for more federal funding to aid science. The dollars not spent today will effect where we will be in the near and distant future.

1022106 APS is the best scientific society and I wish to see it in the same position in future!

1050884 APS is the only society with which I am involved that requires membership to submit an abstract. I think that this policy is bad and should be dropped.

1021438 APS membership maintains an emotional connection with my training as a physicist.

1054737 APS needs to have a focus on the future of physics and general the health of the community. It is the most exciting time to do science. Are we able to do it? do it effectively? do it so anyone cares? I dislike these web-based forms as the opportunities for thought are little, esp when you are multi-tasking. There should be a mechanism to close and revisit.

1025755 APS needs to take responsibility for the way that new discoveries in Physics have been applied in the past, and to assert control over how they are applied in the future. This can be done at the individual level if each practitioner will take some time before publishing a new discovery, to reflect on the applications the world is most likely to make of it, and if those are destructive, to refrain from publishing the work.

1021842 APS should try to expand collaborations with other scientific organizations. For example, I would find natural to allow member rate registration at biophysical society meetings based on reciprocity

1028677 APS's primary goal should be to promote physics, in particular, and science in general. It needs to be steady and steadfast. Should not dilute its effort with pursuit of political correctness, etc. However, in this country and the world that are becoming increasingly reliant on technology where various political factions may try to invoke physics and science to strengthen their political agendas, APS can act as the source of well established and "correct" factual information. Where there are controversies, APS can contribute to keeping the debate along rational and technically sound paths.

1031833 APS's support of DPB is most important to me, including our ability to nominate Fellows. Also included is sponsorship of PRST-AB online journal for our community. Secondary is the opportunity to be involved in CSWP activities.

1053807 As a retired person who is now doing long term scientific research across multiple disciplines, it would be extremely helpful if I could have free or very inexpensive access electronically to publications.

1043735 As my research has moved into biomolecular nanotechnology, I've become somewhat more of a chemist, and I don't fit in with the APS as well any more.

1039952 Because of the cost I will probably need to drop my membership.

1033502 Can we get rid of the damned insurance advertisements? That stuff makes me angry. It's physical spam.

1047769 Do not presume to speak for me on political or funding issues. Work to bring down the high costs of dues. The employee application search system is very helpful. It would be nice if there could be more division meetings apart from the March meeting.

1026938 Every science has a publishing and meeting society. The APS serves my needs.

1041490 For those of us who are in the business world rather than academia, attendance at conferences may be regarded as an extracurricular activity, so weekend conferences can be easier to attend than weekday conferences. Although group life and auto insurance are nice, affordable group health insurance is a much bigger issue nowadays.

1029971 Frankly, these days, I sometimes wonder why I am a member. The fees are rather high, especially if journals are involved. And the extent to which I use APS services is pretty limited. Mostly I do it because this is my profession's society.

1040297 Generally satisfied.

1051370 Generally, I am very pleased with the benefits that APS offers particularly in the quality of journals and the level of professionals. I would like to see much more involvement of members at the local levels or regional/section levels.

1056123 Getting elected as a Fellow in 1984 was very helpful to my career. Ability to meet other physicists at meetings, presenting our work and listing to other developments in the field is another important benefit.

1047092 Go paperless completely (ie PhysToday, APSNews, and journals)

1029486 have updated information from physics and physicists

1040378 Hey, I should've checked your website more often!

1035211 I am an APS member primarily because I like to identify myself with the physics community and to consider myself a physicist, even though I don't "do physics" and haven't for a long time (i.e. I don't teach or conduct research in physics, or even engage in quantitative scientific analysis). But once a physicist, always a physicist, I guess.

1033835 I am generally happy with APS but believe the registration and meetings are much too expensive.

1049630 I am generally pleased with my APS affiliation and the activities and programs sponsored or carried out by APS. However, in the present economic and physical climate, we must do more to make the public and our policy-makers aware of just how essential strong science and technology programs are to sustaining a robust economy, maintaining national security and keeping our country at the forefront of innovation.

1048336 I am generally pleased with my membership, though I still rankle at some past stupid decisions such as not holding meetings in Chicago, etc.

1055374 I am proud to be a member of APS, but I am much more active in AAPT.

1047719 I am satisfied by The APS job

1039669 I attended my first DFD meeting last fall and absolutely loved it!

1045282 I believe APS is still heavily focused on academics and has a rather patronizing attitude towards industrial research.

1025775 I believe the APS should wave the membership fees after a give number of years of membership or a combination of age and years of membership as the IEEE does. It will help physicist to keep involved in their fields after retirement.

1053706 I belong because of Physics Today and because I'm just trying to support the physics community. Other than that the APS really hasn't helped me with anything. It's simply not practical for those of us with too-heavy teaching loads to take the time to take advantage of APS opportunities.

1054565 I belong to (at least) three professional societies. APS is the most professionally run, although perhaps not the most useful to me. Physics Today is a gem and I wish I had more time to read the in-depth articles. However, the news is the most useful to me, which is why C&EN is somewhat more useful to me than PT. BYW, I like the "Adopt-a-physicist" program so far...

1042057 I enjoy physics today and the technical meetings.

1039083 I enjoy sessions sponsored by various fora at APS meetings. I also like general plenary talks at the Spring meeting. However, to encourage more participation in APS meetings, the cost of registration fees plus high-price hotels in the cities where the meeting is taking place is too high for researchers with limited grants.

1025583 I especially like APS because its members play a large part in running its activities through its extensive system of units, committees and forums.

1028809 I feel APS is my home as a physicist and I think APS does a very good job representing our profession.

1046798 I feel very much excited to read, share and enhance my knowledge related to Physics news and APS is the best platform to realize the same.

1032167 I find the APS to be a poor source of support for non-Ph.D. physicists. While some career support is available, it is very meager compared to that available to Ph.D.s.

1036838 I find the relationship between APS and AIP to be very confusing.

1034361 I generally find the APS dues a bit steep for the benefits. Especially when compared with others like AGU, which gives similar benefits for a fraction of the cost.

1037182 I have been a student member (in 67-72) then a full member till now an APS Congressional Science Fellow, a member of POPA several terms, and leader of the P&S Forum (several terms), and believe strongly in the power of APS to educate and inform its members and the Congress, less in its public and education (they are not interested, and AAPT and AAAS doing the latter well). Build on APS strengths, and cut peripheral efforts...

1028465 I have enjoyed my membership in the APS. I enjoy getting the magazines and wish I had even more time to spend reading them. I fully support the APS in offering knowledgeable consultants to teachers, community groups, and policy makers on issues of relevance to physics.

1048386 I have not been an active Physicist in many years. I keep my APS membership mostly for historical reasons. I still think of my self as a physicist as I use the skills and knowledge I acquired studying physics to do the very applied work I now do.

1035887 I have received many benefits from APS and I increasingly appreciate these, year by year.

1021408 I intend to continue my membership indefinitely.

1052412 I joined the APS when I was an undergraduate physics major and have maintained my membership ever since. In the meantime, I got a graduate degree in applied mathematics, my Ph.D. in nuclear physics, and have since switched over to medical physics. While medical physics has its own professional organization, I still maintain my APS membership, although I am not very active in the APS.

1033885 I like being a member of the APS and I like the benefits of being a member. I would still be a member without the benefits. As a professor, I can't imagine not being a member.

1047678 I like the APS Newsletter.

- 1037637 I lost interest in the APS when a former president (James Krumhansel) openly opposed the Superconducting Super Collider.
- 1053231 I made a mistake on an earlier question. I visit the aps journal web sites weekly. My only direct contacts with APS are journals and meetings. The outreach, lobbying, and other activities are fairly far removed from my regular activities. When I join in the APS mail barrage to congress over funding, I almost always get a response from my senator, but it seems like it does absolutely no good at all.
- 1067852 I need tips to become a PRL holder.
- 1037980 I put a lower value on certain APS services only because my university provides some of them (eg, online journal access, benefits/insurance). Otherwise I might consider them crucial.
- 1055576 I read the CSWP Gazette cover-to-cover -- this is a great committee that does great work, and the Gazette is a wonderful publication.
- 1039720 I really dislike getting Auto insurance advertisements with APS endorsement
- 1024542 I received my PHD in Relativistic Astrophysics in 1974. No academic jobs, so I moved into software. Worked as s/w engineer/architect in mostly science/engineering related applications for 30+ years. Now as an expert witness in s/w IP issues. Support APS because physics is interesting and important, not because I work in or near it.
- 1027232 I see the APS playing a crucial role in advocating for professionals and educating the public in issues on renewable energy. Renewable energy will be a defining issue both technically and societally that we as physicists have to play a major role in.
- 1024895 I strongly support APS efforts to inject physics expertise and perspective into public policy. Were it not for that, I might not be an APS member, since my membership in the American Astronomical Society more closely fits my research activities. Nonetheless, my think of myself as a physicist and would feel odd being in AAS but not APS.
- 1046455 I think it is my responsibility to support a society that benefits the field, even if I do not take advantage of all the benefits that come back to me.
- 1031500 I think it is ridiculous, in the era of easy internet access, for journals to be printed on paper and for subscriptions to cost what they do. The cost of a journal subscription is ridiculously high. Make access to _all_ APS journals a benefit of membership and stop printing them on paper to reduce the cost of publication to make this possible.
- 1025947 I use the life insurance program, and find it quite affordable.

1052674 I very much appreciate the umbrella that APS provides including opportunities for students (e.g. presentations at meetings, reduced dues, job listings) I probably don't use as much of what APS provides as I should.

1050753 I wish I knew more about what was available through the APS website. I have been learning slowly, but have the sense there is a lot more I have not tapped into yet. The parts of APS News and Physics Today which I do read, I enjoy, I just don't have enough time to read very much of either.

1028506 I wish that APS had a meaningful journal for publishing interdisciplinary research results, since many physicists now are involved in such projects.

1054202 I wish the Blewetts were followed up by a fellowship for women who had to leave academe for other reasons—eg lack of support makes many women leave, having a way back would bring some superb minds of sensitive people back. ANd one for men too.

1026675 I worry that the APS, in common with many of our national institutions, will or has been commandeered by very questionable "social" agendas such as Global Warming, when not even global warming with lower case letters is supported by ALL the knowledgeable scientists, despite the propaganda.

1029901 I would like to see APS more closely allied with efforts in Europe. It might be appropriate if there was a single, significant international association of physicists with a single major publication encompassing the best of Physics Today and Nature Physics and so on.

1048659 I would like to get more involved by time is difficult.

1034280 I would love to see more career stuff...I like hearing what a person with a phd in physics does besides be a professor or researcher at a national lab. Would love to attend programs designed to help a newly minted physicist decide what career path works for them, maybe something interactive where I'd examine what's important for me at the same time as receiving guidance and info from somebody leading the workshop. Alternatively, maybe you should hire me to create such a workshop!

1046394 I'm a bad pick for your survey because, as a long-time hospital-based medical physicist, I (sadly?) live in a different world than most of the APS constituency. I'm very active in AAPM and its activities but there's little overlap (I think that's unfortunate)

I'm a member because physicists, like any other professionals, need a professional society and joining is what responsible members do. Through my employer, I get free access to PROLA, and my employer also pays for APS meeting attendance, so discounts on journals or meeting registration aren't so important to me. Physics Today is a fantastic magazine if only I had time to read it more thoroughly! APS news is nice to look at over lunch but it could stand to be a bit more substantial.

1027909 I'm a physicist and APS is the American Physical Society! What more needs to be said.

1056113 If FOCUS is part of the APS web site, then I made an error in a previous response -- I usually read FOCUS articles when they are posted.

1030296 In general, I'm happy with APS in most areas. The one thing I strongly dislike is the "Inside the Beltway" column written by Michael Lubell for APS News. His analyses are almost always flawed and reflect a very poor understanding of how science and politics should interact. APS can do better.

1035039 In practice, the DPF offers few opportunities in contrast to the AMS which offers many opportunities.

1020497 Insurance benefits need to be available to members over 70. We don't just quit at 65 anymore. I enjoy the DNP newsletter. I enjoy Physics Today, but wish the editors would concentrate more on physics and less on politics, climate change, etc. I can get that in the newspapers.

1050096 It is an old habit.

1040338 It would be great to have some benefits for the activity of refereeing, for instance discounts on books or the same APS membership. Other professional societies, for instance in mathematics, are already doing this. It could work based on quantitative and qualitative assessments of the refereeing activity in APS journals, promoting responsive and professional referees.

1053089 It would be nice if electronic access were easier when a Physics article is linked to American Physical Society websites or e-mails (i.e. I skip if I have to register to a news paper to have access to the news even if very interesting)

1027666 It would be nice to have a repository of physics knowledge. I wonder if a wikipedia, directed specifically at physics, or maybe joining with other societies, directed at science, would make more people come to the APS site and appreciate the site. It's possible it would be too much of an overlap with the existing wikipedia I suppose.

1048639 It's not the benefits I can receive from you, it is the benefit I can give this organization. I'm a talk show host I can talk about you. I'm a theoretical physicist without degrees -- I'm working with physicists to extract from any point in space. I have a serious theory gravity that will change physics forever. I would appreciate someone who can think outside the box to read my thesis. I've spoken before the APS body on two occasions in my theory was well received

1056597 keep the life insurance program get rid of the annoying wordiness in ALL communications make double memberships much cheaper do something about the catastrophic breakdown in American students/pupils/public understanding of physics please!

1051451 Keep up physics today, APS news, and the occasional emphasis on industrial physics.

- 1043078 Keeps me on balance
- 1043977 Life Insurance offerings seem ridiculous For me, APS mostly organizes meetings and runs journals and I'm content with that.
- 1031934 Love the e-mail forwarding, because it's given me a stable address. Find the group insurance mailings mildly annoying.
- 1042885 Mainly I enjoy reading Physics Today. I'm happy to support the profession in a small way. I work in a small closed field where I find little opportunity for academic-like activities
- 1040025 Membership and APS meeting registrations continue to escalate in price. Meetings tend to be held in expensive locations that require expensive airfares to reach. Local university dorm rooms should be available to all participants as at one of the Seattle meetings. Generally, the organization seems to be run by middle class people who have no clue as to what it's like to live in poverty.
- 1055910 My affiliation with APS started during my doctoral training. At that time going to conferences was a major factor. I have shifted into medicine and am a Department Chairman within a medical school. I use APS to keep up with general developments in physics. I also maintain a life insurance policy through APS.
- 1056446 My affiliation has provided me the opportunity to meet and work with scientists from across the US and the world.
- 1043523 My life insurance policy has been very important since being told that I have a fatal form of cancer.
- 1037273 My primary professional affiliations are with the American Geophysical Union and the American Association of Physics Teachers, but I maintain my APS membership because I identify myself as a physicist.
- 1052987 My principal interaction with APS is through the Division of Fluid Dynamics. I have missed only three division meetings in the past 38 years. As such, it is my most important technical meeting of the year.
- 1046112 My work focuses on the development of medical and industrial imaging applications and there is a strong tendency to lose touch with current academic and research developments. My APS membership is my major means of overcoming this. Physics Today particularly articles on current topics and the book reviews is very valuable. Having articles from the early years of Physics Today and the American Journal of Physics available electronically at low cost would be valuable to me.
- 1026261 Need help in accessing the online version of Physics Today. It dropped off my email inbox and I can't find it anywhere on your website.

1040388 Not sure I liked those questions either, e.g. teaching and research are about equally weighted for me (can't rank one above the other). And what is "basic research?" Should have had different categories (e.g. theorist, experimentalist, industrial development, etc.).

1046132 not sure I mentioned forum on phys and society this is of value to me.

1055950 One can't be an active physicist without being a member of the APS.

1035413 One program that might be of interest for the APS Website would be to make books about Physics (of all types) whose copyright has expired on-line in PDF form for download as well as for on-line references.

1021509 Online journal articles are extremely valuable to me. APS should reduce the cost and facilitate the distribution of this information. A process to encourage collaborations with the authors should be established and maintained by APS.

1047961 Opportunities to participate in leadership roles at the APS

1040126 Our future - this nation's and our world's - depends on the exposing our youth to a solid science education and preparing them for roles in research, exploration, and development.

1023258 Physics Today is really a great magazine. I remember back in the 90's when the topics were far too specialized. Now most of the articles are accessible to most graduate students, which seems to be the right level for a general scientific audience. I was told about the life insurance policy by a former employer, and it was a good thing to know about. The APS policy is much less expensive than the one my present employer provides.

1040500 Please give survey respondents an idea of how long the survey will be/is before/during the activity.

1032894 please make these surveys shorter - or warn me that it will take some time.

1037122 Please read my answers to 25 and 26. We are supposed to be equally concerned about teaching and research at a good university. Do you think you should have provided that as an option?

1053413 Probably just to maintain a member of a professional society.

1052381 PROLA is extremely valuable

1052402 Since I am not engaged in academic physics research, I pay very little attention to APS, except for my topical group (SCCM).

1041824 Suggestion for web: A referenceable archive for computer source codes - sort of a cross between Sourceforge and ArXiv. People

could store their source code on this site and then reference it in journals - this way interested readers could acquire the source code, compile it, and try it for themselves. Versioning of the codes could also be provided to encourage development of codes.

1040984 The annual DFD meetings are irreplaceable in my field.

1045181 The APS home page has become too complicated. Too much information!

1032218 The APS is an international treasure, and the AIP journals are the gold standard for publishing both archival research and high impact research. The dissemination of scientific research is the most important of all programs. The quality of editorial oversight, peer review and world-wide access to APS journals are among the highest priorities for the American Physical Society.

1055031 The APS is one of the best professional organizations in terms of impact, cost to members, and service. The balance of public service, service to the members, and other issues is about right.

1045424 The APS, like similar organizations in other fields, occupies a much less central place than it did at the start of my career. I'm still glad to be part of it, and am glad it is solvent, but I think the biggest challenge is to 'energize the base', i.e., to make members feel more engaged. The single thing that might help the most is to organize small topical conferences. Today these usually take place independently of APS. The big meetings, to me, have lost much of their cachet, as indicated by the fact that distinguished (and other) speakers frequently come just for their own talks and then leave. No chance for sustained interaction.

1044029 The car insurance is annoying. APS news and physics today are great sources to get an idea whats going on outside of my field

1031095 The cost of sending graduate students to APS meetings has become too high. This reduced my interest in APS. The APS journals are great!

1029608 The member benefits (life insurance, reduced rates for meeting registration, discounts, etc.) are valuable and I use them and appreciate them. They just aren't the reason for my membership.

1025977 The most significant benefit I receive as a APS member is the right to give a presentation at APS meeting.

The questions asked jointly about direct benefits including reduced meeting fees, access to journal articles, and group life/health insurance. These benefits are of widely varying value to me. Reduced meeting fees and ability to submit abstract for presentation at meetings are highly valuable. Cheap or free access to articles is irrelevant as most US institutions already have a subscription. I have never used the group health or life insurance and have on interest in those products.

- 1029456 There were some difficulties with the access to the journal database.
- 1032915 This has been a long, obnoxious survey.
- 1026251 This survey became too long I therefore started to just skip through the questions without answering them
- 1022631 This survey is too long
- 1047496 This was tooooooo long! I was ready to simply quit 10 minutes ago
- 1056193 Though I don't read the journals or APS news regularly, I do appreciate my membership. I like the Forum on Education and the work to support women in physics.
- 1047668 To be brutally frank, I am a member of the APS because I'm trying to find a job, and the physics community at large has a bit of a "club" mentality, with the APS serving as the clubhouse. The APS evidently works best for physicists who have already found steady employment while for those of us still seeking, and with skills not so monolithic as "physicist, pure and simple", the APS does not offer any palpable assistance.
- 1024461 Topical Group on Gravity is *very* useful, especially with updates from the NSF program head
- 1031338 Visiting APS members on Second Life... that's a good one! Provide blogs and news with RSS feeds, that will get many of us hooked on a daily basis.
- 1044564 When I have applied for my green card, I asked APS (twice) to send me a letter verifying my membership as I lost my membership card some time ago. My request was silently ignored (twice). Obviously, I had second thoughts about APS membership. However, supporting journals and reduced prices of workshops is more important.
- 1040166 While APS does offer reduced rates for journals, I still find the cost prohibitive for subscribing to the journals I typically read. My library also finds the cost prohibitive (we are a small, 4-year college). Finding ways for people and institutions not supported by grants to have better access to journals would be helpful.
- 1035150 While I don't use the APS insurance, I'm glad it exists. The membership directory was extremely useful once, but I've not used it since. Most of my professional needs are satisfied by the AAS.
- 1044352 You might consider modeling Physics Today after the IEEE Spectrum, which I do read regularly. The IEEE Spectrum considers a very wide range of technical issues without the filter of "is it really electrical engineering" and, I think, has scooped Physics Today with many articles.

Question 27: Comments on their affiliation, the benefits they receive, APS programs, etc.

International Junior Members

1079219 Developments in physics could inform engineering research, since some discoveries might have implications beyond the theoretical niceties. However, physical distance is always a problem, as it costs too much for a junior faculty member to literally fly half the globe to attend meetings. I remain a member mainly to keep the door open.

1078884 I had forgotten about member benefits like group insurance. Here the survey was a nice reminder. Unfortunately, they mostly seem contingent on being a US resident. I've been at CERN for a couple of years now, so seem not to be eligible.

1079956 It has been a wonderful experience since I join APS. The APS news and Physics today are nice to reading and equally inspirational. The benefit are truly are immense. As a matter of fact, I have recommended it to my colleagues and students back in Nigeria.

1079431 Please make a homepage written in other languages, like Japanese.

Question 27: Comments on their affiliation, the benefits they receive, APS programs, etc.

International Regular Members

1062281 After filling in this form, I am starting to wonder why I am still a member.

1078501 all is very fine - nothing to criticize. Suggestion: Try to cooperate in energy with EPS

1066427 Although not currently residing in the US and not being a US national I like to stay as a member (been as a post doc in the US for 3 years). I think I'm not the only one. I prefer to be an APS member, since e.g. European physics community does not have such a strong society. I know that APS is an american society, but still would like to see it considering its foreign and overseas members.

1074830 Appreciate the good quality of Physics Today and the new Physics web site.

1074729 APS is for me the best scientific association in the World

1076872 APS is the glue that keeps the diverse Physics community together. Whatever you morph into, please continue to keep us together.

1078066 APS seems like a sleepy organization in need of new energy to actually do something in the directions it only "talks" about doing...

1061775 APS should avoid to pick up any politically correct activity currently en vogue. Instead it should guide society in scientific issues.

1069783 APS, or any physics societies, needs to serve not only the needs of physicists, but also to serve the public in various aspects in science. If the soil is poor then how can we expect great harvest?

1063060 As a member of the German Physical Society I have reciprocal rights to participate at APS meetings. Thus the benefits of being an APS member as well are marginal despite the high member rates. You might think how to better stimulate these double memberships.

1061846 As a researcher in a university outside the USA, the affiliation helps me to keep informed about the advancement of Physics.

1077641 As an APS Fellow who worked for many years in the USA, but has now been in another developed country (Australia) for 9 years, many APS services are inadequate. For instance Physics Today takes 4 months to get here (whereas Science magazine comes within a week) - I would love for us to advertise in Physics Today, and we would be prepared to pay, but it is absolutely useless for us - we typically receive Physics Today long after the job advertisements have closed! Also for many active physicists, the APS is really a global society, but it is focused on domestic US business

and to a lesser extent developing countries. We might want to think differently in this age of globalization.

1070371 As an overseas Member, Fellowship and prizes seems very restrictive.

1061321 At APS divisional meetings I find a wider coverage of my field of research and meet more colleagues than on international conferences.

1070462 Attendance of the APS March meeting provides an opportunity for familiarizing the broader physics community with my primary field of research - the foundations of quantum theory -- through sessions organized by the topical group on quantum information. Outreach to a broad physics audience is important for any non-mainstream field that is trying to raise its profile, promote itself, secure funding, and secure future positions for students in physics departments.

1061422 Availability of on-line subscriptions of PRL and RMP to solve Engineering issues and to develop unique consumer electronic products to be interfaced with PCs (including healthcare fields)

1074345 being updated about what's going on in physics

1069541 Conferences are a very valuable infrastructure. These have grown (1) far too expensive (2) far too parallelized/splintered into groups. Suggestions: 3 days, morning plenary, afternoon max 5-8 subfields, remainder as posters marketplaces. Avoid commercial conference organizers with 500\$ coffee fees, and expensive downtown hotels (I prefer off-season vacation resorts, or university campuses)

1060451 contributes to my participation in the global science community

1067791 Could the APS sponsor/develop/test a web 2.0 application for online collaboration, like openwetware, but tailored to physicists, and possibly with APS certified access/identification of members and discussion forum of technical problems in physics (i.e. do a step towards open research)?

1051724 Good support

1063787 Has been a constant in my professional life, as it has been for most physicists, I suspect.

1069753 I am a big fun of Physics Today. A few years ago, I switched to online version, but since I travel a lot, I found the paper-based journal more convenient, so I asked Mr. Adam P. Negussie to post me Physics Today. He said yes, but I have never received Physics Today. I wrote to him a few times, and he replied to me every time, but the situation never changes. It is strange since 1) APS news comes to me, and 2) my colleagues receive Physics Today. Since receiving Physics Today is one of the major reasons to be a member of major reason, I am very sorry for this situation.

1067195 I am deeply unhappy that Physics Today reviews so few serious physics books these days, concentrating instead on trade science, biography etc.

1074375 I am no longer doing active physics research and teaching. I now appreciate the news of developments in physics and the social implications of physics. I am also working in philosophy of science and science and religion.

1063575 I am not an US resident. Although I find the lobbying and outreach activities of the APS important, I do not get the benefit in my home country. I am sure there are a lot of foreigners registered at the APS and more attention should be given to them.

1060936 I am satisfied.

1061361 I am very grateful for including me in Matching Members Program during the Serbian aggression to Croatia (years 1992-96)

1069652 I am very grateful to the APS for membership to the premier physics society in the world, being in touch with the latest developments in physics and most importantly reduced subscription rate to Physical Review D and Reviews of Modern Physics.

1072545 I am very happy with my affiliation with APS

1073233 I appreciate the excellent work that you do for our community. I would like to be asked more often to serve as a referee in the APS journals. I have the feeling referees are always the same and may be geographically too restricted to the US and the UK

1064506 I did not receive for several years Physics Today yet I have complained several times.

1072212 I enjoy every bit of APS. I am in a rural set-up and even managing net surfing with electrical power is a difficult job still that could not debar me from enjoying APS.

1064677 I enjoy reading about APS activities on the different areas (not just my own). It keeps me informed about interesting research results in the physics community. I like participating in annual APS meetings, which I can do through APS membership at reduced fees.

1070523 I find APS activities US-centric. I am not sure how it is relevant to me or physicists in Asia in general. However, since being a member helps the general cause of promoting physics, I will continue to be a member for as long as I am still active in physics.

1061048 I find it natural to be a member also of AAPT

1060491 I hang the poster-sized calendar in my office each year.

1069187 I have always admired the APS for it's strong political stance, the support it gives to women and minorities, the freedom that it

allows all members in presenting their work at conferences and the commitment to physics education development and outreach. I believe that the APS is probably the most important community that a physicist could belong to.

1074719 I have always been very glad to be a member of APS. I really enjoyed all the March meetings I attended because of the Science that is presented, and because we can meet friend colleagues. I learned about email forwarding, life insurances, .. while I was reading this questionnaire. Maybe this is already done, but would it be possible to have a page summarizing all these possibilities?

1061876 I have been a APS journal user. That is one of the reasons why I have been a member of APS to support the journal production activity.

1061270 I have benefited from the APS primarily in terms of information and secondarily on being elected a fellow.

1061199 I have observed a strong decline in the quality of editorial process in PRB and PRL in the last one-two years. PRB in particular seems to have hired editors with a PhD in particle physics who lack scientific judgment in condensed matter physics and do not distinguish between experimental evidence and results of computer simulations (e.g. Rubin). The steady climbing of IOP journals in the JCR is surely profiting from this. An editor should be able to distinguish between a sound referee report and unreasonable turf protection from mediocrities. I suggest keeping a file of reversals of unsound editorial decisions and getting rid of incompetent editors before the damage they cause is important.

1073889 I joined (or rather rejoined) the APS fairly recently (<3 months). Thus, I am not yet familiar with many of the programs/services mentioned in this survey. I was an associate member of APS when I was in school, thanks to my student society. Then I drifted more toward the engineering disciplines, following my professional career. I rejoined to APS to keep in touch with the physics community. I have also taught physics some as an adjunct professor on the side, so education issues are of particular interest to me.

1074446 I live in Germany, so many of the activities of APS (e.g. meetings) are not relevant to me. Furthermore, I am no longer directly involved in research, so I am less interested than I might be. Still, I maintain my membership in and support of APS as a matter of principle.

1071615 I need funds for my breakthrough research in particle theory

I primarily took the APS membership to keep in touch with the Physics community. Though my B.S, M.S and PhD degrees are in Mechanical Engineering, I took on this membership because my research was mostly physics related. I particularly enjoy reading Physics Today and APS news. Since moving from the U.S. 5 years ago, I have not availed of any APS services or attended any APS conference. I hope to do so in the near future.

- 1074204 I read APS journals through my institute's subscriptions at zero cost to me otherwise I would value reduced fees for members more highly.
- 1074739 I think OSA better represents my interests, and seems a smaller more focused society. I agree with a recent back page column which talked about self- interested physicists lobbying for increased research funding but not for better education funding for science. This is short sighted.
- 1067802 I think the CD versions of APS Journals for which online access has been obtained in the past through APS membership should be less expensive.
- 1068681 I think you are doing a very fine job and i would join again, even being a non american.
- 1061705 I use the APS website everyday for journals in my research and I read the APS News and Physics Today. These are essential and primary components of my research activities.
- 1075336 I used to receive Physics Today in hard-copy format. I do not seem to be able to access this in-line. This is a pity.
- 1073394 I value Physics Today and would like it to have more information about new trends in physics, rather than on politics or (relevant scientists) biographical information
- 1066932 I very much appreciate the high quality of Physics Today, which I use frequently for teaching purposes, and I also greatly appreciate APS News for keeping me abreast of issues that affect the physics community.
- 1078662 I was just recently wondering if i should cancel my membership...
- 1077085 I work at university in Colombia. Can we set up a local APS "physics club" for undergraduate students in physics like the ones in the USA?
- 1067317 I would like more benefits in the field of access to information at reasonable prizes
- 1064627 I would like to see APS become more objective in its attitude toward human rights and related issues, that is: more independent of attitudes emanating from the White House.
- 1061159 I would recommend membership of the APS to anyone.
- 1061200 Information about news and research in my topic of investigation.
- 1063232 International delivery of Physics Today is very late, 1-2 months.

- 1076216 It helps me to stay in touch with a world wide physics community
- 1074254 It is a sure link across the Atlantic Ocean to follow what is going on there in the physics community, in particular in science policy
- 1077368 It is a wonderful organization and it is succeeding admirably to the changing times.
- 1078107 It is very important for me to attend the APS March Meeting to know recent developments in my nearby fields. (I keep up with the developments in my fields by attending specific conferences.)
- 1074698 It takes too long to receive Physics Today in Brazil!
- 1077590 It's ok. I feel APS is too soft, however, on the topic of tolerating doctrines such as Creationism. What's the point of learning, and then contributing to all those hard sciences if one ends up loosing the battle againts irrationality? I would have had a lot more fun in life if I had started irrational and stayed that way all along.
- 1067115 More world-wide APS programs should be held.
- 1065880 My affiliation to APS makes me feel part of the worldwide community of physicists and reminds me -and provides me a way of reminding everybody- that ultimately my work in physics is for the welfare of all people on earth.
- 1065254 my contact to the US world of physics where i got my PhD and still feel connected with.
- 1078420 Nice to be an APS member, but people working abroad are rather cut off
- 1074941 No extra comments close to retirement and retain APS contacts through interest in Physics/Science.
- 1071423 Phys Rev (all branches) is very well run! Thank you!
- 1077247 Physics Today is the prime concern.
- 1067731 Seems to be doing a pretty good job overall, for such a huge organization. Read "The Tipping Point" by Malcolm Gladwell, especially the part about the "rule of 150". If you could break down the membership into locally autonomous communities of 150 or less, we wouldn't all seem like strangers to each other. APS meetings are oppressive zoos simply because there are far too many people!
- 1060572 Since I have never been a long term resident of the US, many of the programs and benefits offered by the APS are not relevant to me. Online access to APS journals is most important for me, but this is provided through an institutional subscription.

- 1060370 Sorry for low activity with APS recently. Present job takes my time elsewhere.
- 1068792 Thank you for continuing to support the physics community. I'm satisfied with various benefits.
- 1067842 The annual APS DFD meeting is the best annual fluid dynamics meeting in the world and I go whenever I can. It was a great honor to be elected a Fellow of APS a few years ago.
- 1029395 The APS basically disgusts me. It is run by a bunch of pompous elitists for selfish purposes that have little to do with the science or education that I love. I favor a minimal service organization that doesn't involve itself in issues such a global warming or diversity.
- The benefits are far less for foreign members of the APS, of which I am one. However some of this could be fixed relatively simply, e.g. make a PDF version of Physics Today available for foreign members the paper version always arrives months out of date. (Yes I'm aware I can read the articles online, but this is a far less enjoyable experience you don't get the ads, if you print out the articles they look crap, etc. Far better to enjoy the hard work done by the editors, compositors, etc.!) (I note in passing that many of the questions here have not been applicable or relevant to me as a foreign member of the APS.)
- 1077792 The benefits I receive is to know the recent advancement of Physics.
- 1067650 The highest values of affiliation with APS to me is a possibility to present at APS meetings
- 1071514 The main benefit is to be able as a member, to submit abstracts to the APS meetings and be in touch with the physics community
- 1077904 The quality of the articles that appear in Physics Today have greatly declined in the last ten years.
- 1078399 This questionnaire is too long. I almost gave up before the end!
- 1071483 University employment contracts in NZ typically specify that the "research mission" is as important as the "teaching mission", so splitting teaching/ research into primary/ secondary is meaningless...
- 1076206 Vivid knowledge of the APS activity helps to improve the activity of the Physical Society in my own country